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2

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION

HEARINGS

BEFORE THE

COMMITTEE ON COMMERCE
UNITED STATES SENATE

1084
173

SIXTY-FIFTH CONGRESS

SECOND SESSION

ON

S. RES. 170

DIRECTING THE COMMITTEE ON COMMERCE TO INVESTIGATE ALL MATTERS CONNECTED WITH THE BUILDING OF MERCHANT VESSELS UNDER THE DIRECTION OF THE UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION AND REPORT ITS FINDINGS TO THE SENATE, TOGETHER WITH ITS RECOMMENDATIONS THEREON

Printed for the use of the Committee on Commerce

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UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

SATURDAY, JANUARY 26, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., Hon. Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Nelson, Jones, Harding, and Johnson.

The CHAIRMAN. We will hear you now, Mr. Robinson.

STATEMENT OF MR. ROY H. ROBINSON, OF J. C. ROBINSON & SON, BUILDING CONTRACTORS, CHICAGO, ILL.

The CHAIRMAN. Mr. Robinson, please state your name, age, occupation, and so on.

Mr. ROBINSON. My name is Roy H. Robinson, I am a building contractor, of the firm of J. C. Robinson & Son, Chicago. My age is 35.

The CHAIRMAN. Mr. Robinson, you desired to make some statement to the committee on the subject of our inquiry. I will just ask you to proceed with it in your own way.

Mr. ROBINSON. Well, I would like to state first, in order that what I say may be better understood, that while I am a building contractor and thoroughly conversant with building construction, I am not interested in getting any contracts; I am not seeking anything, and my efforts are merely to assist so far as possible by making suggestions which, I think, may be helpful in increasing the output of shipping, particularly in this year of 1918. Because, from what study I have made of the situation, it appears that if the shipping situation is not remedied and saved in this year of 1918, I do not believe it will be much use to be talking about ships for 1919.

What I am about to urge and recommend is new, and I am told that there is an element of risk in it. There is an element of risk in it, but I want to call your attention at the start to the fact that the United States has entered upon a venture which is the greatest venture that has ever been embarked on in this world. We are gambling with twenty, thirty, or maybe forty billions of dollars. We are gambling with millions of lives. There is a risk in everything we do.

If I may be permitted, in order to better understand the reasonableness and the advisability of what I propose, I should like to sum up briefly the shipping situation as it exists. You are already familiar with the details, but everybody does not always put them

together. I want to state first the liabilities and assets that we have to start with in the shipping situation.

The United States Shipping Board in July of this last summer drew up a chart or curve showing the shipping situation. That showed that there was 10,000,000 tons of trans-Atlantic shipping. That is the asset we have to deal with in the shipping situation—10,000,000 tons. That is active shipping, not yachts and all kinds of bottoms which swell the tonnage but are not effective in this war. Against that, the United States Shipping Board stated that there was a yearly destruction of 7,500,000 tons of shipping by submarines and mines, and against that they credit for new construction 4,500,000 tons a year, making a deficit of 3,500,000 tons per year. The result would be if that were continued for three years the trans-Atlantic shipping would be destroyed.

Now, the summary for the year, the year 1917 being closed, it shows that the shipping destroyed by submarines as well as by mines is admittedly over 5,500,000 tons gross. That means in dead-weight—and all our new construction is figured in dead-weight; you have to add 20 or 50 per cent to that—the amount of shipping destroyed in 1917 was 9,000,000 tons dead-weight. The destruction for the last six months has averaged right along about 500,000 tons dead-weight.

A lot of people think that the submarine menace is well in hand now; that the submarines are being mastered and the destruction is falling off. The figures do not show it. The destruction in December was over 500,000 tons of shipping. The lowest destruction in any month since last July was 435,000 tons, so you can see the loss is very regular, about 500,000 tons a month. That is gross. If you add 40 per cent to that to reduce it to dead-weight, you have a minimum of 700,000 tons.

Senator HARDING. May I interrupt you there, please? You make a very startling statement. Is it possible to give the authority of your statement, which is in contradiction of the official figures of the British Admiralty?

Mr. ROBINSON. Yes; I can give you a number of authorities. In the first place, I do not wish to be misunderstood. I am not merely speaking of the British losses; I am speaking of the British and neutral losses, because we are dealing with common carriers. It does not make any difference what flag a ship sails under. The effect on the ocean-cargo tonnage is the same. I have a memorandum here of several authorities on that subject. In the first place, Lloyd-George admitted that their loss was 6,000,000 tons a year. The Emergency Fleet Corporation, July 1, 1917, admitted that the loss in tonnage per year was 9,000,000 tons, but cut that down later to about 7,200,000 tons.

Senator NELSON. But those are only estimates; they are not based on any figures. Where do you get your figures from?

Mr. ROBINSON. I got some further figures from the compilation of the New York Times expert for the year, which is based on official returns. This statement gives the total itemized official losses for ships under and over 1,600 tons for the entire year; it also gives the German claims for the same time, which are larger. The New York Times statement shows a total up to December 22 of 6,371,000 tons gross.

Senator NELSON. For what time?

Mr. ROBINSON. From January 1, 1917, to December 22, 1917.

Senator NELSON. That is nearly a year—11 months?

Mr. ROBINSON. Yes.

Senator JOHNSON. For the year?

Mr. ROBINSON. Yes; that is what I am saying, that the loss for the year 1917 was about 6,500,000 tons gross.

Senator JOHNSON. That is what the witness has been speaking of, the destruction during the year.

Senator NELSON. I do not believe those figures are accurate.

Senator JOHNSON. I am not saying as to that, but he has been speaking of the year.

Mr. ROBINSON. Mr. Arthur Pollard, who is considered the best authority in England on maritime affairs, estimated the loss at 9,000,000 tons a year, with a replacement of 3,000,000 tons a year.

Senator JONES. Is his estimate gross or dead weight?

Mr. ROBINSON. He did not state, but I rather assume it is dead-weight, because he is speaking of the replacement at the same time, and the new construction is always figured in dead-weight.

Senator JONES. Do not the English usually refer to gross tonnage?

Mr. ROBINSON. They always do in their destruction lists, because those are registered vessels, but the new construction is not registered, and they speak of that in dead-weight tonnage. I could mention a number of other estimates based on official information, which run from 8,000,000 to 10,000,000 tons a year, but it is safe to accept the figures of 500,000 tons a month, or 9,000,000 tons dead weight a year.

Senator NELSON. What is your object in getting up such a scare about the amount of vessels destroyed? What purpose have you?

Mr. ROBINSON. My object is this: We are going to be short of tonnage, and if we do not know how short we are going to be we will not make the necessary efforts to produce it. I believe that tonnage can be produced to meet the situation if we sufficiently realize the extremity we are in, but I do not think that if we do not realize it we are going to make the necessary effort.

Senator NELSON. What neutral tonnage has been sunk?

Mr. ROBINSON. I do not know that I can give you the items off hand. The neutral tonnage has suffered rather severely.

Senator NELSON. Which neutral tonnage?

Mr. ROBINSON. Well, Norway has suffered considerably.

Senator NELSON. Do you know how much?

Mr. ROBINSON. I think I do. She had about 1,800,000 tons to start with, and she has lost over a third of it.

Senator NELSON. She had 2,500,000 to start with.

Mr. ROBINSON. Well, authorities differ.

Senator NELSON. No, you go to the Commissioner of Navigation and you will find you are away off.

Mr. ROBINSON. Well, assuming she had 2,500,000, if it is true, as has been repeatedly stated, that she has lost over a third, that would increase the proportionate loss.

Senator NELSON. She has increased her tonnage, so that the net loss is not over 450,000 tons. She has lost about 1,000,000, but she has made up half of it. So the situation is not as gloomy as you think it is.

Mr. ROBINSON. Well, I think it is pretty gloomy when there is a loss of 9,000,000 tons, but I hope it is not as gloomy as I think it is.

Senator NELSON. And I get my information, not from newspapers, but from official statistics published by the Norwegian Government.

Mr. ROBINSON. I dare say your figures are correct. Now, on the basis of 9,000,000 tons for 1917, we can not afford to figure on less than 500,000 tons a month for this coming year.

Senator NELSON. Why can we not?

Mr. ROBINSON. Because it would not be good judgment to do so. We are dealing with an adversary, and if we underestimate him we are going to lose this war.

Senator NELSON. You overlook the fact, do you not, that we are getting out a lot of torpedo-boat destroyers and mine sweepers and sending them over there and increasing our strength in that direction? Do you take that into account?

Mr. ROBINSON. Yes, I do. I understand that while we are building a larger number of torpedo-boat destroyers, most of them will not be ready for about a year. That is my information. Furthermore, it takes a good many destroyers hunting on the surface of the ocean to find one submarine submerged. While it is true that the methods of destroying submarines are constantly improving, we must admit that Germany is not standing still and that she must be improving her methods and is increasing her output of submarines. It has been frequently rumored in the last number of months that Germany was preparing to put out submersible cruisers, ships of large tonnage, probably twice the tonnage they have been using, that will be armed with possibly 8-inch guns. They are now using 6-inch guns on some of those boats that are known to be out.

Senator NELSON. Have you taken into account the fact—and there is as good evidence of that as the evidence you give—that the German sailors are mutinying and refusing to go on the submarines, and they have had strikes there, and lately had to shoot a lot of them? Are you taking that into account?

Mr. ROBINSON. Yes, Senator. I do not take much stock in the newspaper propaganda that is carried on through neutral newspaper agencies by Germany in attempting to slacken the enterprise of her enemies by such stories. I believe that there undoubtedly have been some mutinies, but I do not think they are of very serious concern so far as they affect Germany's ability to carry on the submarine warfare.

Senator NELSON. Do you not know that sailors are afraid to go on the submarines and prefer to go on other ships?

Mr. ROBINSON. Undoubtedly. Every man that goes in the trenches dreads to go to the trenches, but he has to go.

Senator NELSON. Yes; he will not go if he can get a commission.

Mr. ROBINSON. No. But I think the Kaiser will always keep enough men in the submarine service to do his bidding.

The CHAIRMAN. At any rate it would not be safe for us to suppose otherwise?

Mr. ROBINSON. No; it would not be safe. You have got to figure on the worst when you are dealing with an enemy; not on the best. I assume that when we say there will be 9,000,000 tons lost next year we may be underestimating it. We are allowing no factor of safety. In the field that I work in, building construction, we allow a factor of safety of four. When we design a beam to go in a certain place, we figure how much load it will have to carry, and multiply that

by four to provide for contingencies. I do not think it is safe to consider a matter of this kind without a factor of safety, but I am not allowing a factor of safety. I am taking the things as they are.

Now, the next proposition is, what have we got to provide to take the soldiers abroad? We can not strip the existing tonnage of the world, because the shipping which the world already had was inadequate to properly supply Europe and properly carry on commerce before this destruction began. We have got to provide new shipping for any army we figure on. You have probably noted repeatedly the estimate given out by the military people that it takes from five to seven tons to maintain a soldier abroad. That means that if we put 1,000,000 men abroad, we have got to have from 5,000,000 to 7,000,000 tons of shipping in constant use to maintain them there. That, I understand, does not take into consideration the initial trip in getting them there, which they say takes about 7 tons, but after you get them over there it takes from 5,000,000 to 7,000,000 tons for 1,000,000 men to maintain them there.

Senator NELSON. So far, we have sent over quite a lot of soldiers; I do not know how many, but a large number. None of them have been sunk, and only one vessel, returning with some sick, was hit by a torpedo. It seems that the lane has been opened. You are not aware that any of our supply ships have been sunk, are you?

Mr. ROBINSON. I believe two transports were torpedoed returning from France.

Senator NELSON. Yes; on the return trip.

Mr. ROBINSON. Yes. There have been several American cargo ships sunk. The *Luckenbach* was sunk recently while being convoyed with 22 ships. There has been one French vessel sunk, and one American. They were undoubtedly carrying supplies for our army. The Luckenbachs lost another boat a while ago.

Senator NELSON. Do you not know that the Canadians shipped over there between 400,000 and 500,000 soldiers without losing a ship?

Mr. ROBINSON. I do; and that was in the early stages of the war——

Senator NELSON. But they have been shipping them right along?

Mr. ROBINSON. Yes, sir; but 500,000 men were shipped early in the war. That took the bulk of their forces, and that was before Germany was carrying on this extensive submarine campaign and before they were working out upon the high seas. I am hopeful we will not lose any transports, but I am not assuming that in transporting our new Army none of the ships will be sunk. If they are going to sink any of those transports we have got to provide some more.

Senator NELSON. Are you aware that we have taken over the Dutch ships to relieve our ships, and that they are in our service here?

Mr. ROBINSON. I am; yes, sir.

Senator NELSON. And are you aware of the fact that probably 75 per cent of the Norwegian fleet is in the American service?

Mr. ROBINSON. I will grant you that.

Senator NELSON. Nearly all of the Norwegian ships are engaged in the service of this country.

Mr. ROBINSON. I will grant you that.

Senator NELSON. Are you aware of that fact?

Mr. ROBINSON. Yes.

Senator NELSON. Over 1,000,000 tons?

Mr. ROBINSON. Yes; but that does not change the shipping situation on the high seas. Those boats were carrying freight before, and they are still carrying freight, and there is no difference in the carrying capacity.

Now, if we lost 9,000,000 tons last year and if we are going to lose 9,000,000 tons this year, there is 18,000,000 to be replaced. The next question is, what is the smallest army we can put over there? Two million men is a very small number in those campaigns, they would hardly be felt; but suppose we limited it to 2,000,000 men. That would require from 10,000,000 to 14,000,000 tons of shipping for the Army.

Senator NELSON. Do you not overlook the fact that we would not possibly have the 2,000,000 men ready to ship? We have not called them out yet. We have got to call them out and put them in the cantonments and give them training here before we send them over.

Mr. ROBINSON. If I remember correctly the figures as to the Army, we have with our militia and regulars about 900,000 men, and we have drafted about 900,000, so we have about 1,800,000, if I am not mistaken.

Senator NELSON. About 1,600,000 is all we have, and they are not all in the training camps yet.

Mr. ROBINSON. And before the year 1918 is concluded we ought to have at least 2,000,000 men if we are going to do anything. We ought to get busy and draft some more. So we must figure on at least 28,000,000 tons of shipping to hold the balance—not to win, but to hold the balance.

The CHAIRMAN. For the two years?

Mr. ROBINSON. For the two years. Now, I am going to deal with what we constructed in those two years to get a net balance.

The largest amount of shipping ever constructed by England was in the year 1913. That was her banner year in shipbuilding. England is the largest shipbuilding country in the world. She has built shipping cheaper than anybody else. She has the best facilities in the world; she has the best-trained labor, the largest labor supply, the best shipyards, the best supply of material, and with every preparation the most England could ever build was 1,900,000 tons in a year. That was 1913.

And the next year, 1914, she built about 1,600,000 tons, and then she fell down to about 600,000 tons a year.

Senator NELSON. Was not that because she devoted a good deal of her force to her Navy?

Mr. ROBINSON. Absolutely.

Senator NELSON. Not because her shipbuilding capacity diminished, but because she devoted it to other things.

Mr. ROBINSON. No; her man power diminished, and her steel power diminished. She had to furnish steel and coal for munitions. She had to take her men and put them in the army. Of course, you can not do everything at once. The consequence was that in 1916, while she was carrying on the war, she only built about 480,000 tons.

Senator NELSON. How much tonnage did she build of naval ships in that time? Do you know that?

Mr. ROBINSON. I do not.

Senator NELSON. Then you can not tell whether she diminished her output?

Mr. ROBINSON. I am dealing with the possibility of expanding the merchant marine in time of war. We are building, as you emphasized a few moments ago, a lot of destroyers, and we are doing more of that construction for our Navy than we ever attempted to do before.

Senator NELSON. How many have we building now in this country?

Mr. ROBINSON. Destroyers?

Senator NELSON. No; the ships under the Shipping Board and the Emergency Fleet Corporation.

Mr. ROBINSON. I could not tell you how many we have building. I think we have contracted for about 500 or 600.

Senator NELSON. And they are at work on them, are they not?

Mr. ROBINSON. Some of them They are building a yard up at Hog Island that, I understand, will not get any ships built this year. They have not even started to provide the housing facilities for the men. You understand building a yard or contracting for a ship is very different from building ships.

Senator NELSON. Do you know how many we are building on the Pacific coast?

Mr. ROBINSON. No; I do not. I would not attempt to say offhand; but, all told, I believe they have contracted for about 500 of 600 ships.

Last year England, under the stress of knowing that her existence was at stake in this war and dependent upon producing enough ships, produced 1,900,000 tons. That was the most England could produce, with the greatest yards and the best facilities in the world. We commenced in 1916 to build about 531,000 tons. Last year, 1917, notwithstanding the fact that we went in for shipbuilding and attempted to do our best, we built something less than 700,000 tons.

Senator NELSON. You understand we commandeered over 49 ships?

Mr. ROBINSON. Yes; but that did not change the tonnage; it simply meant a change in who was going to run them. Our tonnage was less than 700,000.

Senator NELSON. Most of the ships we have are commandeered ships.

Mr. ROBINSON. Yes.

Senator NELSON. And then we got all those interned vessels.

Mr. ROBINSON. About 600,000 tons.

Senator NELSON. And we got most of the Austrian ships, too, by purchase.

Mr. ROBINSON. The Austrian and German ships all told amount to less than 700,000 tons. These ships that we produced last year, 700,000 tons, are one of our assets; that is new construction to replace lost construction. This year the Shipping Board expects to produce, under all these contracts which it has for last year and this year, about 5,000,000 tons, as I understand. Whether they will do so or not is still a problem. Mr. Hurley has said he might be able to get 8,000,000 tons if everything was very favorable and they could work two or three extra shifts. But they have not the men at pres-

ent to work a single shift; they have not the housing facilities now to accommodate the necessary men. They have at work, according to Mr. Hurley, 145,000 men at present in the shipyards. According to Navy estimates, it takes about a man to 10 tons for shipbuilding; it takes about 500,000 men, they estimate, to turn out from 5,000,000 to 6,000,000 tons of shipping in a year. We have got at work 145,000 men. We are short now 300,000 men to carry out our present program. How are we going to get the 5,000,000 tons of ships if we only have 145,000 men at work?

Senator NELSON. That does not tally with the facts as I understand them. The shipyards out on the Pacific coast, as far as we know, have been able to get all the labor they need as fast as the material.

Mr. ROBINSON. That may be, because they are short of material and the railroads are clogging the whole program.

Senator NELSON. And there is not the dearth of shipbuilders in the shipbuilding trade that you state, according to the evidence here.

Mr. ROBINSON. The evidence is that there are 145,000 at work, and Mr. Hurley is doing everything possible to get more men. They are creating schools for educating men and exerting every influence possible to mobilize more men. They must need them.

Senator HARDING. Mr. Chairman, may I interrupt here? In order to get to the thing that will be helpful to us, I suggest that, having had the witness state the situation, we hear what he would do to cure it.

The CHAIRMAN. I presume he is coming to that, if we just let him go on.

Senator HARDING. I want to let him go on. That is the thing I am interested in.

The CHAIRMAN. I presume this is all leading up to the remedy?

Mr. ROBINSON. Exactly. Now, to hurry along. As I have outlined the situation there is need for 28,000,000 tons of shipping as a minimum, and there is a production of a possible 6,000,000 tons in the United States for 1917 and 1918, and a possible 1,900,000 tons in England for the last year, and the coming year they do not expect under any circumstances over 3,000,000 tons. That is Lord Curzon's own estimate. So we have, to offset this need, from 9,000,000 to 10,000,000 tons as a maximum; in other words, there is 18,000,000 tons to be made up. The question is, where is it coming from? If we do not get it in 1918 what is going to be the situation? The people of France and England and Italy can not feed themselves, and if coal is $150 a ton, as it is this winter, and none to be had—and that is the level of all supplies, because they are all subject to the same shortage of shipping—it looks to me as if a very dangerous and critical situation would develop this fall. That is why I want to propose something that is new, something that you may say is a risk, but which has a promise of meeting the situation.

What I want to propose is some speedy and immediate action in the matter of concrete ships. You have all heard more or less about concrete ships for the last nine months. I have never built any concrete ships, but I have handled steel and I have handled reinforced concrete, and I understand the nature of the materials and their possibilities, and I have done some very difficult and unusual

work with them. The situation as regards concrete ships I would like to outline to you briefly.

A good many people wonder about concrete ships. They say, "Concrete will not float." Well, concrete is about a third as heavy as steel. Steel will not float either. The material is not an experiment for vessel construction. It has been in use for a number of years; in fact, the very first use of reinforced concrete was in vessel construction, back in 1849 in France. It was a small boat, but it demonstrated itself meritoriously. In recent years there has been quite a little done in reinforced concrete for ships, not in large ships, because the commercial competition did not permit of considering heavier ships at the time. Conditions are different now.

Senator NELSON. Those have been motor ships, have they not?

Mr. ROBINSON. The work that has been done has been mostly barge work, Senator.

Senator NELSON. Where did they start to make these ships recently?

Mr. ROBINSON. They have made them all over the world. In Italy for some years back a man by the name of Garibaldi has built numerous concrete vessels. They all proved successful. On the Panama Canal several years ago the Government built a number of large concrete barges for docks and pontoons, which proved very satisfactory. About 8 or 10 years ago there were some large barges built at Baltimore, which were very successful. Friends of mine are operating one of these barges up there now; they operated it for years. They have not had to make any repairs on it, and it has demonstrated its entire suitability for that class of work.

The CHAIRMAN. What size was that?

Mr. ROBINSON. That was about 500 tons; not a large vessel, you see, as compared with ocean vessels, but it demonstrated that the material is suitable for water construction. That is very important.

Up on the Welland Canal there is a large barge that has been in use for a number of years under particularly hard conditions, where they have been dumping rock on it from a bridge up above, 20 or 30 feet. I might point out a lot of cases like those.

In the last year, of course, the matter has been stimulated, and there has been building going on abroad. They have been building concrete barges in France, Sweden, Norway, Denmark, and England, and they have also been doing it in Germany. The result of those trials has been very satisfactory.

A company in Norway has built a plant for building large boats, and has turned out a vessel within the last six months which, under its own power, was taken on a trial trip of 2,000 miles all over the North Sea.

Senator NELSON. That was a motor boat, though?

Mr. ROBINSON. Diesel engine; yes. They are the hardest kind of engine there is to hold down in a ship.

Senator NELSON. Is it not a fact that the first real building of motor boats of the kind you speak of—you have only been speaking of barges—was in Denmark? Is not that where they began to build ships of concrete.

Mr. ROBINSON. No; I would not say that.

Senator NELSON. I mean real ships; I do not mean barges and all that.

Mr. ROBINSON. I think the large ships were started first in Norway. The Danish Government has done more in a way on concrete ships than some of the others, in that the Government has recognized the construction and has issued engineering data as to the formula to be used in calculating the size of the members and the stresses in the hulls, etc. They have given it their official approval by establishing the formula under which the boats are to be built. This boat that was built in Norway and taken on a 2,000-mile trip under its own power demonstrated what had already been seen, that concrete is a very good material to put motive power in.

Senator JONES. How large was that vessel? Do you know?

Mr. ROBINSON. About 500 tons. It was only a small boat, but it demonstrated the feasibility of putting machinery in a concrete boat. The concrete does not take vibration; steel does. The consequence is that in a concrete ship the vibration is taken up, and there is no shaking and loosening from that cause.

There has been a large ship under construction in San Francisco, 5,000 tons. I have some cuts of it here that I will show you afterwards. That has been taken up purely as a private commercial venture. It shows the confidence that engineers have in that construction. They are willing to risk a large amount of money in building this boat merely as a remunerative proposition. That is a good sized boat.

The situation to-day with regard to ship construction, I consider, makes the construction of this concrete fleet imperative. There are no facilities for expanding steel and wooden construction. I have already emphasized the shortage of labor in steel construction. It is hard to get steel riveters and ironworkers for that class of work. It takes highly skilled men for driving rivets. A big vessel holds between 5,000 and 6,000 rivets. The riveting is one of the big time factors. Those men get such high wages that they do not work steadily.

The next consideration is that in steel and wood construction you have got to haul your material long distances. You have got to haul your steel plates, maybe, half way across the continent. You have got to get your men from limited fields. You can not use unskilled labor.

That situation has a double action on materials. Our railroads are just as important as our ships in this war situation, and if we tie up our railroads hauling from Gary, Ind., to the Pacific coast, or to Newark, N. J., we will not only tie up our railroads for the munitions work and the other forms of war work, but also shipbuilding.

As to the wooden-ship construction, I understand they have stopped building wooden ships. The difficulty with the wooden ship is that they can not develop the full strength of the members in the end connections, and they can not build a large wooden ship and can not get enough power in it to drive it fast. Speed is a very important thing in dealing with the submarine situation. The consequence is they have stopped building wooden ships. They can not get the timbers.

The CHAIRMAN. I might correct you there, Mr. Robinson. It is hardly safe to proceed on that hypothesis.

Mr. ROBINSON. I mean they have stopped contracting for any re. That is Mr. Heyworth's statement, anyway. He is in charge

The CHAIRMAN. It comes out about that.

Mr. ROBINSON. I simply quote him. He is in charge of wooden-ship construction, and he made the statement the other day that they were not contracting for any more wood or composite ships.

Senator JOHNSON. I think the facts will bear that out, Mr. Chairman, from things that have come to me from the Pacific coast within the last two or three days.

Senator HARDING. Have you ever placed this matter before the Shipping Corporation?

Mr. ROBINSON. I started on it when Gen. Goethals first came in charge.

Senator HARDING. What is the objection urged against concrete?

Mr. ROBINSON. There is not any objection; simply that the thing is new, and they have had their hands full with what they have done in steel and wood.

Senator HARDING. Have any shipbuilders proposed to construct concrete ships and guarantee them?

Mr. ROBINSON. I understand so, yes. I understand that there are several companies that have proposed to build an experimental ship and deliver it to the Government, with the understanding that if it was successful they were to have a contract for so many more. I was told just the other day there were people who proposed to build 50 ships if the first one was satisfactory.

Senator HARDING. You have been seeking contracts?

Mr. ROBINSON. I have not. No, I have not been seeking any contracts. I have been simply urging the matter of concrete ship construction, and I have proposed from time to time to the Shipping Board some methods for rapid and simplified construction, because I have been interested in trying to work out some way to get the shipping quickly. That is the big thing in this situation.

Senator HARDING. What I am trying to get at is this. Has the difficulty been that the concrete promoters are seeking to get the Government to take all the risk in this matter? Is that the difficulty?

Mr. ROBINSON. Of course, the Government has taken a position which makes it rather difficult for private individuals to do anything in private shipbuilding, because the Government has occupied, perhaps unwittingly, the position of a dog in the manger; they did not do anything themselves, and at the same time, with the threat of commandeering anything that was produced, they prevented private capital from coming in, taking away the bait of the large remuneration which otherwise would accrue to them. For instance, a ship nowadays is worth its weight in gold. If a man could go out and build a ship with the knowledge that if it was a success it would not be commandeered, undoubtedly much capital would be invested.

Senator HARDING. From your knowledge of the subject what difference in cost is there between a concrete ship of 5,000 tons and a wooden ship of 5,000 tons?

Mr. ROBINSON. It depends upon how many you are going to build. If you are only going to build one, that is much more costly.

Senator HARDIING. Say 20.

Mr. ROBINSON. I would say that the concrete ship would cost about two-thirds of the other; possibly less if the production were stimulated and they were going to carry it on on a larger scale. The first ship would possibly cost more, but after you produced a number

and you had your regular standard forms and everything for the reproduction you would build them faster. That is where you make speed and money in concrete.

Senator NELSON. With respect to this concrete ship that they are building in California, are you aware of the fact that the Shipping Board has waived this right to commandeer it?

Mr. ROBINSON. No; I did not know anything about that.

Senator NELSON. That was stated before the committee.

Mr. ROBINSON. It may be. Mr. Weeks, of the Bureau of Standards, went out there about a month and a half ago to see that ship. The Government had not taken any notice of it up to that time. He went out there, and he was so impressed with the ship that he came back and made a recommendation, as I understand it, that the Government build a test ship, and they are preparing to prepare plans, and in about a couple of months from now the Government will probably be building a concrete ship for a test. But that is not going to affect the 1918 situation. That experiment is not going to produce any concrete ships for 1918. That will be tested out probably in the summer or fall, and along about fall they will have arrived at the conclusion that they should build a lot of concrete ships.

Senator NELSON. Do they not require a good deal of lumber in connection with concrete ship construction?

Mr. ROBINSON. It depends on how they are building them. You can use a large amount of lumber if you use one system, or you can use another system which requires no lumber. There are a number of different systems. Some are form systems; some are formless systems. This ship out at San Francisco has been built with wooden forms, I believe. Of course, the great benefit in concrete construction is that when you once have a set of forms for a project like a ship, you can use them over and over. When you have once produced your initial equipment you can reproduce the ships over and over again.

Senator RANSDELL. Would that be true as to the lumber as well as the metal forms?

Mr. ROBINSON. Yes. The metal forms are more durable than the other, of course. Where we expect to use the forms only once or twice we use wooden forms, because the initial expense for the metal forms is great. In shipbuilding metal forms could be used very successfully.

The CHAIRMAN. There is some such system as that called "cast" concrete, is there not?

Mr. ROBINSON. There is; yes. There are a number of different systems. There is the system of applying the concrete by means of air pressure, just as you squirt anything out of a hose. Under that air system a shield is held up behind the reinforcement, and on that the concrete is deposited as a spray and driven with great force into a very compact mass. The compactness is very important in ship construction; you want to have dense concrete, because it is waterproof. This compressed air concrete is very dense. You do not have to use forms with that system.

The CHAIRMAN. What is the relative speed of building those ships?

Mr. ROBINSON. Concrete construction is infinitely faster than any other kind of ship construction. If this shipping situation is taken

hold of aggressively in a big way it will not be long before large hulls can be turned out in 30 days time to a hull. It is not an impossible feat to turn out 8,000 to 10,000 ton hulls in concrete in 30 days. That can be done readily as soon as the industry is organized and improved systems are used. It would be possible to produce in this country in a year, if the proper force and encouragement are put behind it, 10,000,000 tons of concrete shipping without staggering the country. We have got the concrete men, the concrete engineers, the concrete contractors all over the country. It is their regular business. They have been doing it for years. Those men are now an asset in this war; they could be made one of the biggest assets in the country.

It is the same way with our cement production. The history of Portland cement in this country is one of the miracles of manufacture. We have become one of the great cement-manufacturing countries of the world. That material is no asset, so to speak, in large part, in the carrying on of this war; but if concrete were adopted we would relieve the steel, which is now overcrowded, and turn all that material and all that industry into an active war factor. The steel production in this country, before this condition came about here 10 days ago when everything was tied up, was about 75 per cent of normal, whereas the demand was 120 per cent. The demand is going to increase. We have not provided for ordnance yet in this war. We are going to have to provide a tremendous flood of munitions in steel. We want to relieve the steel market. I do not mean by that to stop building steel ships—we should build all we can—but if the concrete ships prove successful the steel supply will go much further.

The CHAIRMAN. How about the supply of cement?

Mr. ROBINSON. They can supply all that is needed. The present capacity of the cement industry in the United States is from 75,000,000 to 125,000,000 barrels. Ten million tons of shipping would take about 5,000,000 or 7,000,000 barrels, so you see it is only about 10 per cent of the industry.

The CHAIRMAN. What is this concrete composed of?

Mr. ROBINSON. Concrete is composed of sand, gravel, crushed stone, and Portland cement. Now, that is a very important factor in this connection. Those are nearly all local materials. We produce them locally all over the country for our building purposes. We do not have to tie up the railroads hauling material all the way across the country. The cement mills are the same way; we have them all over the country. They are particularly abundant near the Atlantic seacoast. Forty per cent of the cement in the United States is produced around eastern Pennsylvania. Then there are cement mills scattered through New Jersey, through the South, and everywhere.

Now, we could locate, say, five or ten shipbuilding yards around the United States at different points, some in the South, where they could work all the year around under the most favorable weather conditions: some in the North, along the New Jersey coast, along the Chesapeake. Those places are all near the cement industry and centers of big labor supply.

Then, you see, we have the labor supply that they have not got in these other industries. The concrete construction takes unskilled

labor. All the building work we have been doing around the country we have been doing with concrete labor for years. Those men are accustomed to it. At the present time they are of comparatively little use in the war, but on concrete ship construction they would be an important asset. They are the one kind of labor of which there is not a shortage.

Senator HARDING. Have the concrete engineers adopted any plans of reinforcement?

Mr. ROBINSON. There are a number of different designs for the reinforcement. Of course in concrete construction there are thousands of different ways of doing it, and the inventiveness and the resourcefulness of the engineers is constantly developing, and the consequence is there are a number of ways of doing it. But there are hundreds of engineers in this country to-day that are doing this work every day who could be employed on this proposition at once.

What ought to be done is to apply Liberty motor methods to this proposition. The Liberty motor is the one big credit to the United States in this war. In three or four days they designed one of the finest motors in the world. Ordinarily that would take months. The same thing can be done in the concrete-ship proposition. We have not time to fool around two or three months to make a design for a ship, and then in the fall test it out, and say, "That is fine; we ought to have done it before." We have got to do it now, and we have got to take some risk.

That is why I started out with the proposition that this war is the biggest risk in the world. We are gambling thirty, forty, or fifty billions of dollars on a chance. Then why not spend $50,000,000 to start with, and risk $250,000,000 to-morrow? If we do, it may save us. If we do not, where are we going to get the 18,000,000 tons of shipping?

Senator NELSON. Is there any patent outstanding anywhere for this concrete construction?

Mr. ROBINSON. No; the art is not patentable, broadly. There will be lots of patents for different methods and different details of construction, just as there are in concrete construction in building work. But the idea itself is no more patentable than a concrete building would be patentable. Only details are patentable.

Senator NELSON. Who has those patents that you speak of?

Mr. ROBINSON. There are no patents in this country that I know of. There undoubtedly are applications in for patents. I suppose these people in San Francisco have on file an application for a patent for doing certain things in certain ways which they have used in this ship they are building. But of course the inventiveness of the engineers of the United States has been more or less focused on this for the past few months.

Senator JOHNSON. Can you tell me whether Lloyd's or the American Bureau of Shipping has made a report on the concrete ship in San Francisco?

Mr. ROBINSON. I do not think they have. I took the matter up with them a couple of months ago to find out what they were doing on concrete ships, and they said they had not done anything. Now, Lloyd's in England and Lloyd's in Germany have already approved concrete-ship construction, and there are ships there in England now under the supervision of Lloyd's. Lloyd's insures the ship and

assumes the responsibility for it. So you see, Lloyd's recognizes concrete construction as a legitimate and safe field for insurance.

Senator JOHNSON. Have you ever seen the San Francisco ship?

Mr. ROBINSON. No; I have not.

Senator HARDING. What is the market on Portland cement now?

Mr. ROBINSON. The price? Oh, it is around $2 a barrel; $2 to $2.25.

Senator HARDING. That is about 75 per cent over normal.?

Mr. ROBINSON. Well, the Portland cement price has fluctuated very much in this country, because there was overproduction a few years ago. The normal price is about $1.25 or $1.75, and due to that overproduction it was as low as $1. The price is higher now. I do not know why it is, except that everything is higher in these days.

Senator JOHNSON. Have you been in San Francisco since the fire?

Mr. ROBINSON. No; I have not, Senator.

Senator JOHNSON. Is there much concrete construction of tall buildings or large buildings?

Mr. ROBINSON. Oh, yes. In last year nearly all the building construction that had to be done on time was done in concrete, just like this Hotel Washington here in this city.

The CHAIRMAN. Does the steel in a concrete ship amount to a great deal?

Mr. ROBINSON. It is quite an item, but the steel in the reinforced concrete ship is in the form of rods. Rods are the only kind of steel that is easy to get. The rods are rolled locally all around the country. Small mills in different places roll rods, but only the large mills in a few places roll steel plate. The consequence is that the rod supply is not an impediment to ship construction, whereas the rolling of steel plate and all that is.

Senator HARDING. You do not mean to say that the Shipping Board has discouraged private capital from undertaking this enterprise?

Mr. ROBINSON. I did not mean that, but I mean that in holding the ship subject to commandeering they have unwittingly, as I said before, done that.

Senator HARDING. Do you think there is a prospective diminution of profit in commandeering, when a concrete ship can be built for 20 per cent less than a wooden ship? Do you think there would be a loss of profit through the process of commandeering?

Mr. ROBINSON. If you could build a concrete ship and put it out on the market to-day it would be worth three or four or five hundred dollars a ton. The Government, I suppose, would pay you about $150 a ton at that.

Senator HARDING. But do you not think it would be profitable even at that?

Mr. ROBINSON. Yes; but it is the excessive profits that lead people to go into something new.

Senator HARDING. But don't you think that would be excessively profitable?

Mr. ROBINSON. Yes, it is so excessively profitable that those men have already gone into it. I think others will follow them, but they will not do it quickly enough. There are men here in town right

now that want to build a lot of ships. I have not met them, but have heard they were here.

Senator HARDING. It was testified here that the hull represente approximately 50 per cent of the cost of the ship, or maybe a littl more, if I remember correctly. You are a concrete and cemer specialist, I take it?

Mr. ROBINSON. Yes.

Senator HARDING. I want to ask you a perfectly innocent questior Do you not think a concrete hull can be built at half the cost of wooden or steel hull?

Mr. ROBINSON. Yes, I think when they are under constructio they can be built for half. But I do not want to overstate anything I said two-thirds; I believe if the Government took hold of the thin and organized it the Government could build them for half easily

Senator JONES. Is there not this difficulty also in the present situa tion, Mr. Robinson, that in starting the building of these ships o private money they would have no assurance that they would b able to get the steel supplies and the machinery?

Mr. ROBINSON. That is the point I want to make. You can no go out in the market and buy machinery to-day. I made inquir not long ago, and I was told, "We can not sell you any engines fo two years." Nobody can get those things but the Government There is the situation.

Senator HARDING. Of course, you understand, Mr. Robinson, th concrete hull would not relieve the machinery market?

Mr. ROBINSON. I am just coming to that, or I want to refer t it before I stop. While I do not know about what is being done i the power situation, I believe that if we produce a sufficient numbe of hulls to meet this emergency we will have to be looking right int the machinery proposition. I think if we produced enough hulls t meet the emergency, then we would be confronted with the fact tha we have not provided the machinery. But the machinery can b provided if we take steps now. Don't wait. I am not saying tha the machinery is not being provided for, because I do not know any thing about what the Shipping Board is doing, but I know if there i to be a tremendous number of hulls furnished there is going to be strain on the machinery market, and that wants to be looked intc

Here is what should be done. The machinery for these boat should be standardized just like the Liberty motor proposition. I should be divided into parts, and the parts should be parceled ou all over the country to the factories most suited to the particula part. And there should be assembling plants. The hull plants ca just make hulls; they can send them to the assembling points, an at those assembling points will be received the parts from all ove the country for the standardized power units. When you begin t specialize that way you make speed.

Senator RANSDELL. Is it your contention that concrete ships wi take the place of steel ships as well as wooden ships?

Mr. ROBINSON. I do not say that they should; no. They shoul be taken up at once as an auxiliary to increase our output; and th reason particularly for that is that it would drain a new supply c material and labor that would not delay our steel and wooden shi construction.

Senator RANSDELL. How does the cost of the concrete ship compare with that of the steel ship? You gave us the comparison with the wooden ship.

Mr. ROBINSON. There is not a great deal of difference between the cost of wooden and steel ships, strange as it may seem. They cost very nearly the same.

Senator RANSDELL. If your theory is correct, I take it it would relieve the demand for steel in these steel ships?

Mr. ROBINSON. Exactly.

Senator RANSDELL. You would not need the steel for the construction of the ships, and therefore you could use it for the other things.

Mr. ROBINSON. Exactly. It would be diverted to the other necessities of the war. Just look at the munitions proposition. In 1915 there were over 50,000,000 shells fired in a few days by the allies to gain a few miles. How many shells is it going to take to break that western front? We have got to use a lot of ammunition on that line, and we have got to break that line at several places at once. These local offensives have proven a failure. England put 5,000,000 men in the field after France had the Germans stopped. And with only a 30-mile haul, with the greatest mercantile marine in the world at their command, and with those 5,000,000 men thrown in as a new force into that front, when Germany had only half the strength she has to-day on that front, what did they get?

This year Germany has twice as many men. Col. Repplington served a warning the other day, saying that Germany is going to have two men on that front to the allies' one. The German front has been cut from 2,000 miles to 1,000 miles. Germany has only a 1,000-mile front this year to defend as against 2,000 miles last year. She has practically all the coal and iron of Europe, outside of England, right in her hand. That is a terrible handicap. But we have got to overcome it, and we have got to do it with ships. We have got to build up a great big pyramid, with ships at the bottom. And if we build up a 30,000-ton pyramid with 5,000-ton ships, it is going down.

Senator HARDING. You do not need to argue the need of ships to this committee, I think. You seem to understand this proposition pretty well. What is your suggestion? Do you recommend that the Shipping Board let extensive contracts on essentially the same basis of cost as the other ships, or would you have the Government establish a great concrete shipbuilding yard and venture on the enterprise on its own account?

Mr. ROBINSON. Here is what I would do, and I would do it right away. I would do it within seven days. I would create a concrete department in the Shipping Board, an independent department. I would not burden the men that are pressing ahead with the steel ships and wooden ships. I would put in concrete men, men who work in concrete every day, who are enthusiastic about it, able men who are accustomed to meet emergencies and do things quickly—the contractors. I would put them in charge of the concrete department. Then I would put under them about 20 or 25 designing engineers, men who are designing in concrete every day in every form you want it in. I would have them make designs and pass on designs that other people make and submit, and be stimulating and speeding up production by every possible means. With these con-

crete engineers I would put 5 or 10 marine engineers and naval architects; not one, but several. Those men working with the concrete engineers can reproduce anything in concrete for shipbuilding purposes. You see, the trouble has always been that the concrete men are not naval architects, and the naval architects do not know anything about concrete. The naval engineer can tell you the size of a frame or a transverse rib, and the concrete engineer can immediately reduce that to concrete.

With such an organization I would immediately provide for 5 or 10 yards and start them at once. I would have the Government start to build the ships at once, for 1918—not 1919, but 1918. A ship now will be worth 10 in 1919.

Now, with those 5 or 10 yards, start ahead on the assumption that the concrete is going to work. The material has been demonstrated as suitable. So far as framing goes, there is no reason that we can see why a large ship will not work as well as any other type of framing. Go right ahead on the assumption that maybe you are going to lose a few million dollars. Maybe you will lose $50,000,000. Maybe it will be a failure. That will be the smallest failure in this war. We are going to make millions of dollars' worth of munitions that we are going to destroy on the assumption that they are going to hit something. That is a big chance; why not take a chance on this proposition? We have got to have a remedy. Let us be willing to waste, if necessary, what would ordinarily be a large sum of money but what in this affair is merely nothing. Go right ahead without experimenting on an extensive scale, and build ships on the assumption that they are going to work.

The CHAIRMAN. Could not these scientific people give some assurances on that score?

Mr. ROBINSON. Absolutely. There is assurance in that ship out in San Francisco. Those people are engineers—naval engineers and concrete engineers, that are venturing from $500,000 to $1,000,000, and they are absolutely confident that it will work. I will say, there is no reason an engineer can see why a concrete ship will not work as well as any other. It is a matter of engineering calculation. We have certain loads and certain stresses to calculate.

Of course, people will say, "It is new." There is no objection to that. Of course it is new. But the Brooklyn Bridge was new; the Eiffel Tower was new; the Hudson Tunnels were new. They were based on the engineers' calculations, and the engineers were satisfied they were right. The chance of a concrete ship not working is very small. We do not know why it should not work.

The CHAIRMAN. I saw an illustration a few days ago of the launching of a concrete ship, not a large one. It was launched bottom side up.

Mr. ROBINSON. Yes: that was one of those Norwegian boats. They build them upside down, and when they go into the water the center of gravity throws them over. They think it is a little nicer to build their forms in that way, where they can get at them.

Senator RANSDELL. Are there any concrete ships in actual operation anywhere?

Mr. ROBINSON. I mentioned awhile ago that one has been working in Norway under its own power which made a 2,000-mile trip over the North Sea, and proved very successful. I have a cut here, I

think, of a concrete boat built at Montreal within the past two months. I had a letter from the men that built it. It is a fair-sized boat, and it was launched very successfully, and everything is just as they expected it to be.

The CHAIRMAN. Is there any difference between the practicability of a concrete ship of 500 tons and one of 5,000 tons, so far as you know?

Mr. ROBINSON. So far as we know there is no difference in the working of a ship of 3,000 or 5,000 or 8,000 tons. It is the subject of engineering calculation the same way. The way the naval architects figure the stresses in a ship, they calculate it as a beam of that length on a wave of the length of the boat. They can calculate that just the same for a 600-foot boat as for a 300-foot boat.

Senator VARDAMAN. I have not been able to attend these meetings. Has the witness stated the relative cost of those ships as compared with wood and steel?

Mr. ROBINSON. Yes. I stated, Senator, that I would say the concrete ships could be built very nicely for two-thirds the cost of the steel or wood. I do not mean by that that an initial ship could be built that cheaply, because the first ship would cost a good deal more; but where they are reproduced in numbers the cost is greatly reduced.

Senator RANSDELL. If your theories are correct, I presume we would be utilizing a material which exists in enormous quantities, whereas steel and lumber both are not found in such large quantities.

Mr. ROBINSON. Exactly. I was just saying that I would locate 5 or 10 yards around the country. We can locate those yards where there is plenty of sand or gravel deposits, or crushed stone, and where the cement hauls are short and there is an unlimited supply. We can build the ships as fast as the submarines can destroy them, and faster if we have to.

Senator RANSDELL. There is practically no end to the amount of material available?

Mr. ROBINSON. There is practically no limit to the extension of the industry.

Senator JONES. What is the strength of reinforced concrete as compared with the strength of steel?

Mr. ROBINSON. There is no difference. I mean, you can take any steel member and reproduce it exactly in strength in concrete. That is a matter of calculation. If you have a 24-inch steel beam you can produce a reinforced concrete beam of exactly the same strength by an engineering formula.

Senator JONES. Take it on rough water; what would be the difference, if any, between the concrete ship and the steel ship?

Mr. ROBINSON. None, so far as we can see.

Senator JONES. Suppose the ship were on the fulcrum of a wave.

Mr. ROBINSON. That is the way the ship is designed—figuring it on the fulcrum of a wave. The engineer takes a ship 600 feet long, and he figures that is a 600-foot beam, and he figures what the stress on that beam will be when it is on the fulcrum of a wave. Then he figures what the stresses will be if, instead of resting on the wave as a fulcrum, it rests on two wave points at the ends of the hull. They figure that way for a steel ship, and they would figure that way for concrete ships. They are all figured the same. You have a

certain amount of stresses, and the engineer provides the strengt meet those stresses.

Senator JONES. In the matter of vibration, I think you said t would be less vibration in a concrete ship than in a steel ship?

Mr. ROBINSON. There is no vibration in concrete. Here is ano point we have not touched on. As I have pointed out before, steel ship is one mass of rivets and rivet holes. That does not n strength; it means weakness. When a torpedo hits a steel ship explodes with that tremendous force it shakes that hull from one to the other, and it shakes those rivets and it opens up seam: through the boat. The consequence is the water rushes in. It not make any difference about the transverse bulkheads; the sh just a lot of material that is ready to loosen up and pull apart.

Now, in a concrete ship we build the ship with transverse b heads every so often—say, every 50 feet. Now, when a tor explodes against that ship the concrete localizes that explosion. material will shatter, and you will get a hole maybe as big as room—maybe half as big—in that part of the ship, but it wil localized. There will be a big hole there, and that will be betv two bulkheads. The water will enter the ship, but it will be reta by the bulkheads and the ship will not be sunk. That hole ca repaired very easily. When a ship is punctured in that way, have a curtain that they let down over it. The hole is very e patched with new concrete. So you can see that, so far as torp resisting properties are concerned, the concrete ship is a very pro ing antidote for the torpedo, and that is a very important point.

Senator RANSDELL. You say it will not shake the ship to pie

Mr. ROBINSON. No; it will just localize the force of the explo where the blow is.

Senator RANSDELL. How is that on a wooden ship now?

Mr. ROBINSON. Well, a wooden ship is a pretty shaky ani Wooden ships are not supposed to be built for large ocean traffic heavy engines in them. They open up and sag. They have go be calked. A torpedo would loosen up the calking and everyth I should say a wooden ship would not stand a torpedo very we

Senator RANSDELL. No better than the steel?

Mr. ROBINSON. I think it would stand it better than steel.

Senator JOHNSON. What would you say as to the compara mobility and strength as between the two materials—steel and crete?

Mr. ROBINSON. So far as strength is concerned, I personally w prefer the concrete ship.

Senator JOHNSON. To a steel ship?

Mr. ROBINSON. Yes.

Senator JOHNSON. How is it as to possibility of breakage and of mobility?

Mr. ROBINSON. There is nothing in that. A concrete ship w be just as elastic as a steel ship. You can design a concrete b and load it so it will sag down just like a steel beam. They are l elastic.

Senator JOHNSON. Have you any mode of construction for conc ships that you would suggest?

Mr. ROBINSON. Why, I have two or three plans in mind w would produce concrete ships quickly, by which the concrete s

ould be started immediately. Lots of other people have good ideas esides myself. They may be better.

Senator RANSDELL. How does the weight of a concrete ship ompare with that of a steel ship?

Mr. ROBINSON. Well, the concrete ship is heavier. That probbly is one of the reasons why concrete ships did not develop before he war, for the reason that the competition was so keen they were utting every bolt and beam out of a ship that they possibly could, o keep the weight down.

Senator RANSDELL. Is the concrete very much heavier?

Mr. ROBINSON. I should say it is probably 10 or 15 per cent heavier.

Senator RANSDELL. Then it requires more power to propel?

Mr. ROBINSON. No, not after it is under way. After it is once in motion the weight does not make any difference. The only thing that makes any difference is the resistance of the water, which is determined by the wet surface of the hull and the shape of the hull. So long as the shape of the hull is the same it does not make any difference.

Senator RANSDELL. So the machinery would have the same power?

Mr. ROBINSON. The same power. You can drive the concrete ship as fast as you want to. You can put speed in it, and speed is a very important thing in this submarine situation. If you have seen the figures in the table, you have noticed that they run right down as the speed increases.

Senator VARDAMAN. But the weight of the ship has something to do with its carrying capacity?

Mr. ROBINSON. That is the point. That is probably the reason why before this time concrete ships were not highly developed commercially. But here is a point we are overlooking in that connection. As we have shown, a concrete ship can be built cheaper than a steel ship. Suppose the concrete ship is 10 or 20 per cent heavier. If you build the ship large enough to take the same cargo, you see, you would still cut under the cost of the steel ship, so there is no loss.

Senator VARDAMAN. You say a concrete beam would have the same elasticity or resiliency that a steel beam would have?

Mr. ROBINSON. The same effect. When they test beams for laboratory purposes they load them to the breaking point and break them and see what they will stand. You can see photographs of those tests showing how the beam is loaded until it bends. We load concrete beams, where we are storing things, until they sag right down.

Senator VARDAMAN. You do not think that the wrenching of the waves would crack it more readily?

Mr. ROBINSON. No; you see, it is interlaced with steel all through it. If you used concrete that did not have steel in it you will get all those effects, but when you put steel in it it is another thing.

Senator VARDAMAN. What proportion of steel would there be in the beam?

Mr. ROBINSON. It will run generally from about 2 to 3 per cent of the cross section. That is, if you have so many square inches of concrete in the cross section, about 2 or 3 per cent of that would be steel.

Those prices on cement that I spoke of a while ago include th freight haul and the cement sacks. If you deduct the cement sacks about 40 sacks a barrel, of course you reduce the cost.

Senator RANSDELL. That also includes a profit to the men wh manufacture it. The Government could manufacture its own cement could it not?

Mr. ROBINSON. I do not think that would be practicable at thi time, because it takes a long time to build a cement mill.

Senator RANSDELL. But the Government would not have to pa much for the gravel. It would have gravel beds.

Mr. ROBINSON. Precisely.

Senator VARDAMAN. What is the difference in time of constructio of these ships?

Mr. ROBINSON. There is a very important point. It takes abou six months ordinarily to build a steel hull. Of course, they hav built some in three or four months, but if they build them in si months they will be doing pretty well. When they once get ther going they can build concrete hulls in from 30 to 60 days. I do no mean by that that the first ship is going to be built in that time, bu after they are once started they can be built in that time.

Senator JOHNSON. Senator McCumber would like to have yo explain, please, the mode of construction that you have in your min as to the specific ship.

Mr. ROBINSON. Well, there is one system of construction which was presenting to the Shipping Board, which I think is a very desir able one for speed because it would eliminate any experiments losses. I mean the time required. That would be to use structura steel framing for the hull. You see, there is no element of uncer tainty about structural steel framing for hulls, because they are al built that way. Now, the concrete for the shell is a thoroughly demonstrated proposition. These concrete barges, etc., demonstrat that for the shell of a ship concrete is perfectly suitable. With concrete shell and steel framing you get a ship where the element o uncertainty is reduced almost to nil. I think that certain types along that line are very advantageous for quick development.

Then, of course, there are other types, too. I would recommen that they would not confine themselves to one type, but go righ ahead and build a number of types. And this is the importan point, that they build them for production; not to test them, bu to go right ahead on the assumption that they are all right. If they are lost, all right. Suppose we lose $50,000,000 worth of ships what of it?

Senator JOHNSON. Well, we are spending for the "know how" a Hog Island some millions of millions upon millions.

Mr. ROBINSON. Exactly. Suppose that Congress would pass bill for $250,000,000 worth of concrete ships to be built at once What would that do? It would set the country on fire. All th building industry and concrete people all over the United States whether there was ever a dollar of that spent or not, would imme diately get busy on the impetus that would be given the productio of ships. Just the fact that the Government had appropriated tha amount would have a wonderful effect. But then go to work an spend $50,000,000 as quickly as they can spend it, with preparation t spend the rest of the $250,000,000, and more than that. If the firs

ships prove wrong, it is a small loss. The war is costing us about $40,000,000 a day; it is costing the allies and all of us about $160,000,000 a day. Why, the expense of the war for a week would build 10,000,000 tons of shipping. If we do not do this, we are losing the best opportunity there is to save the shipping situation. And we have got to save it in 1918. If we do not save it in 1918, are the people of Italy and England and France going to suffer through another winter? I am afraid not. I am afraid they are going to quit.

The CHAIRMAN. You would not save it if the ships did not work?

Mr. ROBINSON. Of course not, any more than any of the other expenditures which we are putting into the war, if we lose the war. But it is a small loss if we lose it, and if it works, why it is the biggest thing in the war.

Senator NELSON. Have you stopped to reflect on this, that we can build the ships, as many as we please, and we can not stop the sinking? If they go on and sink our ships carrying food to Italy and France, what good does it do to get more ships?

Mr. ROBINSON. There is one of the important arguments for concrete ships. They are not going to be able to sink those, in my judgment, the way they sink wood and steel ships.

Senator NELSON. If the Government should take up this cement-ship proposition, do you not think we had better get options from the cement manufacturers of the country?

Mr. ROBINSON. I certain would have an agreement with the cement industry as to the price.

Senator JONES. We could commandeer it.

Mr. ROBINSON. Yes; we have fixed the price of steel and we fix the price of coal. There is no reason why we could not fix the price of cement.

Senator JONES. Have you submitted these matters to the Shipping Board?

Mr. ROBINSON. I have spoken to them, yes, sir; in a way. But here is the position the Shipping Board is in. The Shipping Board has been conservative at the start of this enterprise. They had their hands full with the question of steel and wooden ships, we [illegible]. Mr. Goethals was in the board, and Mr. Goethals said, "It looks very interesting and promising, and we will consider it." And then later the committee on standard ship construction advised me they would not do anything new in ship construction; they would not do anything that had not been tested; in other words, they were going to wait for private individuals to risk their money on the testing.

Senator JONES. When did they advise you of that?

Mr. ROBINSON. They advised me of that, I think it was August or September, that they would not recommend any kind of construction that had not been tested. Until some private individuals had staked their money on it, there would not be anything doing.

I do not mean to infer, gentlemen, that the Shipping Board is to be criticized on this proposition. I think the Shipping Board has on its hands the biggest undertaking that was ever attempted in the world, and I think those men who are buried in that terrible duty are simply submergered with whatever they do. Also as to there are [illegible] as to what has to be done.

Senator JONES. In other words, we are to establish a concrete department?

Mr. ROBINSON. That is it.

Senator JONES. And you think we can not make a success unless we do?

Mr. ROBINSON. Unless we do; and put a lot of active concrete men in there, and, if necessary, lock them in a room, tell them to build ships whether they will sink or not, to build the best kind of a concrete ship that can be built, and I will say it is a 90 per cent chance they will make good in every way.

I have no interest in this thing; it is purely patriotic. I ought to be in a uniform in France or doing something here. I followed this building proposition because I am a builder. I realize the merits of concrete work. I have done lots of difficult things that it was thought could not be done; they have always worked. I know the nature of the material. Naturally, I want to help to increase the shipbuilding.

Senator JONES. You have never attempted to build a concrete ship?

Mr. ROBINSON. No, sir; I have not.

Senator JONES. But you have had a great deal of experience in working concrete?

Mr. ROBINSON. Yes; I have had.

Senator VARDAMAN. Have you had experience in shipbuilding?

Mr. ROBINSON. In a minor way on the Great Lakes. I have worked around the Lakes where I had to build my own barges and things like that, and I have had to scow across the Lakes and handle my own vessels, so that I know something about the conditions; and then, of course, I have been studying this thing for the last year or more, so I have gathered more information.

Senator McCUMBER. You spoke—if I may be allowed, Mr. Chairman?

The CHAIRMAN. Certainly.

Senator McCUMBER. You spoke about having the parts of this ship with a steel frame made in different places and shipped to the place where they may be assembled. I wish you would explain to the committee how you would make these concrete blocks and attach them to the combined steel and concrete hull.

Mr. ROBINSON. I will explain that. I devised a method of construction. I kept off of it more or less, because I am not urging anything of my own; that is the farthest from my mind; this is entirely secondary. But I have devised a method which I know is very rapid, and I think will be very successful in concrete ship construction; that is, it is what I call a fabricated steel-concrete ship. The framing members would be steel and frame members of the shapes easiest to obtain, worked up in designs which produce the greatest strength. These could be standardized and made all over the country in the small bridge shops. You would not have to have large shops, because they are simple members that the bridge shops can turn out with great ease.

You will not have to go to a shop with great big, heavy machinery. Those could be made in great quantity; they could be all gotten ready while the preliminary work was going on. Then, we can make, under this plan of mine, large concrete ship plates, cast in steel frames, in very large sections, say 250 to 300 square feet, and do away with all the complicated steel riveting of the small ship plates, and then those steel frames in the concrete attached directly to the steel

frame and set up for the hull, so that when these are assembled on this steel frame you have a complete and sealed hull, and all that work of making the plates and frames can be going on in vast quantity, and the plates can be made of standard form, with exactness, because made right under your eye, with the smallest cost, and in advance of the assembling, so that after the first ships proved a success you would have all the stuff to assemble in vast quantities and if any modifications have to be made, those should be made, if any experimentation showed changes required. That is a possibility that I am presenting to the Shipping Board.

The CHAIRMAN. How do you fasten them?

Mr. ROBINSON. With a bolt or rivet or interlock them. You see, on a big plate like that, the bolting would be very small, only a fraction of the ordinary riveting; and then those plates might on the outside of the steel leave a pocket behind, although the steel itself steels the thing, and then we show that the concrete filler with compressed air so as to complete this filling up. That is a system which is particularly adaptable to a high speed construction without any waste of time; everything can be gotten ready in advance, and then they can be turned out one after another in very rapid succession, and with a small amount of labor.

Senator McCUMBER. Would there be any advantage in that method of construction over the construction in a particular type?

Mr. ROBINSON. It would eliminate all the form work that we have on this ship.

Senator McCUMBER. Would it be better than the form work?

Mr. ROBINSON. I think that it would be if anything better. I do not think there is very much difference in the finished ship, except that it would be lighter, because we can make these plates very light.

The CHAIRMAN. I think that is all, Mr. Robinson.

Mr. ROBINSON. Thank you.

Senator JONES. Thank you very much, Mr. Robinson.

Mr. ROBINSON. Gentlemen, I appreciate the opportunity of talking to you.

STATEMENT OF CAPT. ALBERT F. PILLSBURY, DISTRICT OFFICER, EMERGENCY FLEET CORPORATION, SAN FRANCISCO, CAL.

The CHAIRMAN. Gentlemen, this is the district officer on the Pacific coast, located at San Francisco. Mr. Pillsbury, tell us how long you have been district officer.

Mr. PILLSBURY. I was asked to come East, Senator, on the 14th of April, and left for Washington on the 16th of April. I remained here until the 17th of April, and returned to San Francisco then.

The CHAIRMAN. How recently are you from there?

Mr. PILLSBURY. I left there on the 14th via Los Angeles, where I remained some days inspecting work.

The CHAIRMAN. What experience have you had in the construction of ships; what knowledge have you on that subject?

Mr. PILLSBURY. I was brought up on the sea coast of Maine, and as a boy I went around the shipyards and worked some; and then I went to sea and became a shipmaster of sailing a

vessels, and for the last 15 years I have been ashore in San Francisco, the first nine years of that time, as salaried surveyor for the San Francisco Underwriters, and during that time I worked continuously in connection with the surveying and construction of ships and at times attempting to salvage operations up and down the Pacific coast and to the Hawaiian Islands and Mexico. For five years previous to last year I was in business for myself as a ship expert, ship surveyor, and during that time I planned and made contracts for a number of wood and steel ships, and superintended their construction.

The CHAIRMAN. You became district officer for the Emergency Fleet Corporation when?

Mr. PILLSBURY. The 1st of May.

The CHAIRMAN. Last year?

Mr. PILLSBURY. Yes, sir.

The CHAIRMAN. Your headquarters are at San Francisco?

Mr. PILLSBURY. Yes, sir.

The CHAIRMAN. Captain, will you tell us what the conditions are on the west coast there, what progress is being made?

Mr. PILLSBURY. At the present time, in the California district, we have under contract, about 77 steel steamers.

Senator NELSON. For the Government?

Mr. PILLSBURY. For the Government, and 29 requisitioned steel steamers; and besides that there are 16 contracts for 16 ships pending at this time.

Senator NELSON. Wooden ships?

Mr. PILLSBURY. Steel ships; these are all steel ships, of which I speak now. The tonnage of the 106 commandeered and contract ships is something over 1,000,000 tons, and the 16 additional ships will be about 160,000 tons in addition to that; of that amount we will, in all probability, complete about 500,000 tons.

Senator NELSON. Not quite half?

Mr. PILLSBURY. Not quite half—that is, in California; but the latter half of the year we will be going at a rate which will give us more than 500,000 tons for the year, because some new parts are being developed.

Senator NELSON. Have you no wooden yards in your district?

Mr. PILLSBURY. We have five or six wooden yards in our districts and they will turn out something like 20 or 25 wooden vessels this year of 75,000 to 80,000 tons, in addition to the half million tons of steel.

Senator NELSON. They are what they call the Ferris type?

Mr. PILLSBURY. They are both types, some of the Hough type and some of the Ferris.

The CHAIRMAN. What is the extent of your district?

Mr. PILLSBURY. My district extends from Coos Bay to San Diego, but recently the work has been subdivided. An officer has been put in charge of wooden ship construction, and I am now turning to the steel ship construction; that situation I believe exists all over the United States.

Senator NELSON. May I ask, Mr. Chairman, a question?

The CHAIRMAN. Certainly.

Senator NELSON. Will you please tell us what your duties are as inspector—I mean the work you have to do as to the character of it?

Mr. PILLSBURY. We supervise the construction of all the ships from the beginning.

Senator NELSON. You have an inspector at each yard under you?

Mr. PILLSBURY. Yes, sir; and several at the larger yards.

Senator NELSON. They report to you?

Mr. PILLSBURY. And they report to me.

Senator NELSON. And your work is to see that the construction is carried on according to the contract and specifications?

Mr. PILLSBURY. Yes, sir; and that the payments are made when they are due.

The CHAIRMAN. Is the work going on regularly now, Captain, as fast as you can have it go?

Mr. PILLSBURY. Reasonably well.

The CHAIRMAN. Is there any trouble of lack of material or labor?

Mr. PILLSBURY. Up to about two months ago there was delay on account of material, but since November the material has been coming in reasonably good.

The CHAIRMAN. Is that material for the wooden ships or steel?

Mr. PILLSBURY. I am referring to steel, but material also for the wooden ships is coming in pretty much as required.

The CHAIRMAN. Is there a possibility of speeding up by increasing the labor supply?

Mr. PILLSBURY. We are going to try and work two shifts. Whether we will have labor enough to work two shifts it is hard to say.

The CHAIRMAN. All yards are now on the one shift?

Mr. PILLSBURY. One shift, with a little over time, and a second shift working in the plate shops getting the material fabricated, and in the assembling shops that brings it out and hangs it up in place ready for the riveting gang, and also in the machine shops, as required.

Senator NELSON. Have you had any labor troubles there in connection with the shipbuilding operations?

Mr. PILLSBURY. Yes, sir; they had labor trouble the latter part of September.

Senator NELSON. What was the nature of it?

Mr. PILLSBURY. The men demanded an increase of about 40 per cent—between 40 and 50 per cent—and remained out two weeks, and at the end of that time a temporary agreement was reached whereby the men returned to work. The wage-adjustment board subsequently came to the Pacific coast and took up this matter.

Senator NELSON. And they gave an increase of how much?

Mr. PILLSBURY. It is about 43 per cent in all.

Senator NELSON. Forty-three per cent over the 1916 rate?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. You include with the 43 per cent the 10 per cent bonus?

Mr. PILLSBURY. Yes, sir: it was first 31 per cent, and then 10 per cent, and that made about 43 per cent or 44 per cent.

Senator NELSON. That is the bonus for working six days in the week?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. Have you had any trouble with men laying off part of the time?

Mr. PILLSBURY. We have found that impracticable to carry out that feature of it. Because in the large plants, for instance, like the

Bethlehem, working 12,000 men, they could not investigate if a mai was absent, whether he was sick or whether he was attending a funeral, etc.

Senator NELSON. Do you have lots of men that lay off—do no make full time?

Mr. PILLSBURY. There are always men laying off for variou reasons; some legitimate and some, I suppose, if followed up an investigated, would not be legitimate reasons.

Senator NELSON. Have you had a strike or threatened strik recently out there among the metal men?

Mr. PILLSBURY. We had a strike of the men that were not workin in shipyards, because they were not given the same 10 per cent rais they were given in shipyards, and the result was that they gave th men in all the shops in San Francisco, in fact in California, the sam 10 per cent. An agreement was signed between the representativ employees and employers.

Senator NELSON. Is there any difficulty in getting sufficient labo in the yards?

Mr. PILLSBURY. There is a difficulty in getting all the skilled labo that is required; there is no difficulty in getting the common labo and some of the yards are making riveters from the common labo and are compelled to do so.

Senator NELSON. Your riveters are the highest priced men, ar they not?

Mr. PILLSBURY. They are, if they work piecework, but all me chanics now are getting practically $5.80 a day as a minimum.

Senator NELSON. $5.80 a day?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. And what is the maximum?

Mr. PILLSBURY. Well, in some cases good men are paid half a dolla a day more.

Senator NELSON. They decline, do they not, to work by the piece

Mr. PILLSBURY. No; they have not. I have a wire before me fron my office to the effect that the largest shops have granted an increas on the piecework, which was proper, because they were working o the old agreement, and now they are working ---

Senator NELSON (interposing). They can earn more by piecework can they not?

Mr. PILLSBURY. Unquestionably, but in the end it is much cheape to anyone who is having work done.

Senator NELSON. To have it done by the piece?

Mr. PILLSBURY. Yes, sir; even though these men make $10 a day it is cheaper.

Senator NELSON. I see something in the paper here which Senato Jones had yesterday, a clipping from the Washington Post of the 24t of this month, which I will read. It contains this statement—and believe this yard is on the Pacific coast. After I read this I woul like to have you explain it:

> In this yard wages have increased so that a pieceworker can earn $9 for a day o eight hours. Yet disquieting signs of strikes on the Pacific coast that may come b February 1 are already apparent.
>
> It is almost incredible that men would rather do day work at $5.80 a day when b performing their patriotic duty they could increase their earnings to $9.
>
> Conditions existing in this Pacific coast yard are symptomatic of those found in number of other yards, some of them on the Atlantic coast. In some yard more serious conditions prevail.

Wages are steadily increasing, and workmen in the Delaware district, on the American Clyde, are going from one yard to another, receiving an increase in wages with each change, a state of affairs demoralizing to the whole shipbuilding industry.

Employers themselves are largely responsible. Some way must be found to stabilize the labor market, as well as wages, on a permanent basis, if possible, for a year.

One shipyard reports that although no workmen have been discharged, 2,300 hull workers have left its employment during the past three months. Their places have been filled by floating workmen from other yards, at useless expense, and causing great delay in the construction of ships for which our allies are eagerly looking.

A Pacific coast yard averages at the present time 175 new men hired daily, an equal number stopping work every day.

So serious has the situation become that a suggestion has been made that it may be necessary to appeal upon the colleges and universities for help * * *.

What have you to say about that?

Mr. PILLSBURY. There is, of course, a good deal of unrest among the men, and a good many men are changing about, failing to report, and being taken on each day.

The CHAIRMAN. It is stated in that same article that in some instances, where they used to drive 350 rivets a day they are refusing to do that and probably driving one-third to one-half of that number.

Mr. PILLSBURY. We, of course, have reports of inspectors and builders of the lack of efficiency on the part of the men, which is borne out by facts.

The CHAIRMAN. What is the cause of that?

Mr. PILLSBURY. I suppose there are two causes: One is the unrest and the other is the large number of skilled and unskilled men we have taken in. We have taken that up with the labor representatives, and at the time when the men struck in the outside shops for the 10 per cent which they had received in shipyards; the matter was then taken up again with the representatives of labor, and this brought permanently to their attention, and they were asked what could be done to better the condition. They then promised that if the 10 per cent was made universal in all the shops they would try and do their utmost to get the men to turn out a good day's work, and said that when the first award was made by the shipbuilding adjustment board that they did not agree to it and signified their disapproval at the time and for that reason they did nothing to encourage the men. But they said they would now do all they could to speed up the output of tonnage, and we are going to take the leaders at their word and ask them to see that the men do turn out a fair day's work. But that will not be accomplished in a week or two; it will probably take five or six weeks before the men get settled down

The CHAIRMAN. That is the yard at Oakland, Moore & Scott, I believe?

Mr. PILLSBURY. Yes, sir.

The CHAIRMAN. Are they having trouble now?

Mr. PILLSBURY. They are having the same trouble as the other yards.

The CHAIRMAN. The complaint is the men will not work?

Mr. PILLSBURY. Yes.

Senator NELSON. On what grounds?

Mr. PILLSBURY. They will not turn out work; that is all.

Senator NELSON. Here is the paragraph, if you will excuse me, Mr. Chairman——

The CHAIRMAN. Yes.

Senator NELSON (continuing). I have finally struck the paragraf in this article that I wanted to call your attention to:

In one of the greatest shipbuilding plants before the war the average number rivets driven by a gang was 350 a day. Since the war this rate of production h steadily decreased, and at the present time the average has fallen to 130 a day.

What do you know about the average work of a riveter?

Mr. PILLSBURY. They have not been doing in the last year an thing like 350 a day.

Senator NELSON. Was that the rate they were working before?

Mr. PILLSBURY. They may have done that before the war. The of course, each yard had only picked men, and if the man did n work well he could not stay.

Senator NELSON. What has been the rate now?

Mr. PILLSBURY. The rate now is something like 200.

Senator NELSON. That is, it has been a reduction from 350 to 20 Is there any agreement among the union men, either expressed implied, as to how many rivets they are to put in in a day: have the an understanding among themselves on that subject?

Mr. PILLSBURY. Not a definite understanding, so far as I know.

Senator NELSON. You mean, there is no definite understandin but is there not some understanding that they are not to put in mo than so many rivets a day?

Mr. PILLSBURY. I do not know that there is.

Senator JONES. Have you heard that there was?

Mr. PILLSBURY. No; I have not.

Senator NELSON. I read in the papers a while ago that there wa a strike among the metal men, which was a sympathetic strik because they employed materials that were not made in union shop

Mr. PILLSBURY. Yes; that was so in San Francisco, at this shipyar of Moore & Scott.

Senator NELSON. Are they building for the Government?

Mr. PILLSBURY. They are building for the Government, and th strike was on the part of their men refusing to work on boilers th were constructed in Portland by the Willamette Iron Works?

Senator NELSON. A nonunion shop?

Mr. PILLSBURY. A nonunion shop.

Senator NELSON. That was the grounds of their strike?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. How long did that strike last?

Mr. PILLSBURY. That strike lasted practically three or fou months, but it did not materially hold up the delivery of any of ou ships.

Senator NELSON. Has it been adjusted now?

Mr. PILLSBURY. Yes, sir; it has been adjusted.

Senator NELSON. How was it settled?

Mr. PILLSBURY. They are working on those ships—it was settle in this way: At the time the wage-adjustment board was in Portland they induced the management of the Willamette shop not to discrimi nate against union men.

Senator NELSON. That is, the shop was making the material?

Mr. PILLSBURY. That is the shop that was making the boilers.

Senator NELSON. Up in Seattle?

Mr. PILLSBURY. Up in Portland.

Mr. PILLSBURY. That had existed for a month or two previous to that time, the men were becoming very restless.

The CHAIRMAN. Since this increase of 43 per cent, how has the production been?

Mr. PILLSBURY. The men went out either a day or two before New Years and they were out 10 days. Up to the time I left it would be hardly fair to express an opinion as to what they had done.

The CHAIRMAN. They did obtain an increase of 43 per cent?

Mr. PILLSBURY. They did.

Senator HARDING. Why did they go out?

Mr. PILLSBURY. The shipyards had granted the 10 per cent war-service premium.

Senator HARDING. They were seeking for the 10 per cent war premium?

Mr. PILLSBURY. In the other shops, the same as the men were getting in the shipyards, effective December 15.

Senator HARDING. Has that been granted?

Mr. PILLSBURY. That has been granted, but only after the men were out about 10 days; so now the wages are uniform in California.

Senator NELSON. That 10 per cent is based on six days' work in the week, is it not?

Mr. PILLSBURY. It was; but in the agreement made between the employers and the employees no reference was made to that, and all the shipbuilders are members of the employers' association.

Senator NELSON. We were given to understand here by members of the Shipping Board that that 10 per cent was a bonus given for six days' work in a week; we were told that the adjustment board increased their wages 31 per cent over the 1916 rate, and then the 10 per cent bonus was for working six days in the week, eight hours a day; that it was conditioned on that. Now, you say that is not a condition; that the bonus applies to all?

Mr. PILLSBURY. It applies to all.

Senator NELSON. Without regard to the time they work in a week?

Mr. PILLSBURY. Yes, sir; according to a subsequent agreement between all the employers and the representative employees.

Senator NELSON. So that now they get a straight 43 per cent increase over 1916, without regard to whether they work one day or six days in the week?

Mr. PILLSBURY. Yes, sir.

Senator HARDING. What is the agreement effective February 1?

Mr. PILLSBURY. That was an agreement between representatives of the employers and employees, and all the employers are members of the Metal Trades Association of California.

Senator HARDING. But that has been made effective in advance?

Mr. PILLSBURY. That has been made effective; yes, sir.

Senator HARDING. Then, from this time on there is no premium for the six-days-a-week service?

Mr. PILLSBURY. The men have the privilege of reopening the case on the ground of an increased cost of living, but that only; they agreed not to strike.

Senator JONES. Captain, here is another statement in this article that I want to ask you about:

> One Pacific-coast shipyard employing 3,000 men on hull construction has been able to induce only 10 per cent to engage in piecework, under which productivity can be rapidly speeded up.

Do you know anything about where that yard is?

Mr. PILLSBURY. No; but the piecework rate was not immediately readjusted, and naturally, I suppose, the pieceworkers felt they should be increased, and it was understood when I left that the builders would get together and formulate such increase as they thought proper and submit it to the men. I had a wire from my office last evening stating that that increased piecework rate had been put into effect, and that the working conditions are reasonably satisfactory.

Senator JONES. This goes on to say this:

Many men who would gladly engage in piecework in a spirit of helpfulness and for the additional wages are openly dissuaded from doing so by their associates. Apparently the idea is that the less work done by the individual the more men will be employed.

Do you know anything of that kind?

Mr. PILLSBURY. I do not know of it personally; that may have been until that rate was advanced.

Senator JONES. Did any of your representatives or men under you report anything of that kind to you?

Mr. PILLSBURY. No, not to my knowledge.

Senator JONES. In this way wages have increased so that a pieceworker can earn $9 for a day of eight hours. I think you referred to that a while ago.

Mr. PILLSBURY. Yes, I did.

Senator JONES. Here is a statement. I want to ask you if you know any facts that justify the statement:

Yet disquieting signs of strikes on the Pacific coast that may come by February 1 are already apparent.

Do you know anything of that sort?

Mr. PILLSBURY. I do not; and from the information received from my office, I judge it does not apply to San Francisco.

Senator JONES. You do not think that applies there anyhow?

Mr. PILLSBURY. Yes, sir.

Senator HARDING. Is there an agreement between the unions and employers as to the amount of production for a day's work.

Mr. PILLSBURY. No, there is not, Senator; that is the unfortunate part of it. It perhaps should have been a little better worked out.

Senator HARDING. You know a good many unions guarantee a certain production as a minimum for a day's work?

Mr. PILLSBURY. Yes, sir; I know that.

Senator HARDING. The printers do that, for example.

Senator NELSON. Have you found any difficulty in securing material for those Government ships as promptly as it was needed?

Mr. PILLSBURY. I think I already stated that up to November there was difficulty; ships were held up for the lack of material, but since November the material is coming in in good quantities.

Senator NELSON. Have you reason to think that you will have an ample supply of labor for the carrying forward of these ships, expediting this Government program of shipbuilding?

Mr. PILLSBURY. I am a little doubtful about having a full supply.

Senator NELSON. Do you think it is possible to work out there more than one shift?

Mr. PILLSBURY. Not to a large extent.

Senator NELSON. Could you get men enough to work in two

Mr. PILLSBURY. I think not to a large extent, and I think the better results will be obtained by getting the builders to put in more slips. They always get more work and better work in the daytime than at nighttime, and I think the policy of the emergency fleet is to help the builders put in more slips so they can lay down more ships at one time and put more men on those ships in the daytime rather than to work them double shifts.

Senator HARDING. Is there a hull in San Francisco that is unequipped because labor will not touch it?

Mr. PILLSBURY. No, sir. There was. At the same time the men were boycotting these boilers they were boycotting two wooden hulls built by the Hammond Lumber Co., because that was a nonunion shipyard. That yard that built those ships is located in Eureka, and they were built there and towed down.

The CHAIRMAN. Were those Government ships?

Mr. PILLSBURY. No, sir; they were private ships.

Senator JOHNSON. Those were small wooden ships?

Mr. PILLSBURY. Yes, sir. But that, I think, also has been settled, although there is some difficulty yet up at Eureka, where Mr. Hammond is building four wooden hulls for the corporation.

Senator HARDING. You mean labor is still boycotting that yard?

Mr. PILLSBURY. Not boycotting; but there is still some trouble there. I think the men are trying to unionize the yard, and Mr. Hammond is opposing it.

The CHAIRMAN. Is there any delay in his work there on that account?

Mr. PILLSBURY. No; I think not. I think he is going along. The Hammond Lumber Co. are large operators. They have mills and lumber interests and shops and do a very large business.

Senator NELSON. Capt. Pillsbury, are you or are the men under you making any special efforts to secure men?

Mr. PILLSBURY. No, sir.

Senator NELSON. You are not doing anything in that line?

Mr. PILLSBURY. No; we are not doing anything.

Senator NELSON. How do the shipbuilders there get their men; through the unions?

Mr. PILLSBURY. No, sir. The men usually apply at the gate in the morning for the job, and I suppose the foremen send out word.

Senator NELSON. Are you familiar with the wood shipbuilding industry out there?

Mr. PILLSBURY. Only in my district.

Senator NELSON. Are they getting along well with the wood shipbuilding industry there?

Mr. PILLSBURY. I would think reasonably well; yes, sir.

Senator NELSON. There is one yard, I think it is at San Diego, but I may be mistaken, where they are building a concerte ship.

Mr. PILLSBURY. No, sir; that is at Redwood City; that is near San Francisco.

Senator NELSON. Are you familiar with that matter?

Mr. PILLSBURY. I made an examination of that ship on New Year's Day.

Senator NELSON. How large is that ship?

Mr. PILLSBURY. About 5,000 tons deadweight capacity.

Senator NELSON. What conclusion did you come to about the ship?

Mr. PILLSBURY. I think it is a very worthy experiment. I shall watch it with very great interest.

Senator NELSON. But it is still in the experimental stage, you think?

Mr. PILLSBURY. Yes, I would consider it to be so.

Senator NELSON. Do they contemplate running that with motors?

Mr. PILLSBURY. No, sir.

Senator NELSON. They contemplate running it with steam?

Mr. PILLSBURY. With steam. My own understanding is that the owners were to tow this hull for one or two voyages on the coast first before they put in the machinery.

Senator NELSON. Tow her and try her out?

Mr. PILLSBURY. Experiment in that way, towing her with cargoes.

Senator NELSON. Without putting any machinery in her?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. That is the plan.

Mr. PILLSBURY. That is my understanding.

Senator NELSON. And that is the only ship they are building there?

Mr. PILLSBURY. That is the only concrete ship.

Senator NELSON. And that is on private account?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. And they have an understanding in their case that the Government will not commandeer the ship?

Mr. PILLSBURY. I believe so.

Senator NELSON. We were told so by the members of the board here.

Mr. PILLSBURY. That I do not know.

Senator NELSON. Do you know anything about the construction of concrete ships?

Mr. PILLSBURY. No, sir; I have had no experience. I went down for my own information. It was the first opportunity I had.

The CHAIRMAN. When do they expect to launch her?

Mr. PILLSBURY. Early in March.

Senator NELSON. When did they begin on it?

Mr. PILLSBURY. They began on it, I suppose, in August; but then, of course, it was a new thing; it had to be developed. They had consulted some of the best experts in and about San Francisco on reinforcing. The Standard Oil Co. put their technical staff at their disposal.

Senator HARDING. Captain, do you know of any scientific objections to the concrete ship?

Mr. PILLSBURY. No. I imagine that the strength of that hull is perhaps fully as great as that of a steel hull. I have no doubt but that the experts have figured it out and have given it greater strength, given it a larger margin of safety.

The CHAIRMAN. How about the cargo-carrying capacity as compared to the weight?

Mr. PILLSBURY. I understand the dead-weight capacity of that vessel would be between 400 and 500 tons less than a vessel of similar dimensions constructed of steel.

Senator HARDING. Why is that?

Mr. PILLSBURY. Because of the heavier weight of the hull.

Senator RANSDELL. You mean the carrying capacity, not?

Mr. PILLSBURY. The initial weight of the hull will be 400 or 500 tons greater than if constructed of steel, and that will reduce the dead-weight carrying capacity by that amount.

Senator RANSDELL. You mean by that that the walls of the ship will be more thickly made and therefore add to the weight of the hull?

Mr. PILLSBURY. Yes, sir; if that were a steel hull the average thickness of the steel would be approximately one-half inch or nine-sixteenths inch steel plates. The thickness of these walls is 4 inches.

Senator JONES. Captain, you heard Mr. Robinson's statement here in full, did you not?

Mr. PILLSBURY. Yes, sir.

Senator JONES. Did any objections occur to you to the suggestions he made?

Mr. PILLSBURY. I would think, on the whole, the suggestion was a very good one, to assemble a lot of experts in concrete work to see if they can work out something.

Senator JONES. From your experience as a shipbuilder and ship operator, and your knowledge, so far as it goes, you could see no special objections to what he proposed?

Mr. PILLSBURY. In the concrete hull—there was only one thing not prominently brought out. It seems to me that the delay with our present program will be occasioned more through lack of machinery and boilers than through the hull construction. I believe that practically all of our hulls will be completed before the machinery or rather slightly in advance of the time when the machinery is ready, and if any large amount of new tonnage was to be constructed, I would suggest that motor engines be used, and that the experts be gotten together to devise an American Diesel engine.

Senator JONES. At any rate, if they contemplate building a lot of these ships they would have to make extra efforts with reference to machinery?

Mr. PILLSBURY. Yes, sir.

Senator JONES. And coordinate that effort at the present time?

Mr. PILLSBURY. The Diesel engine, when its proper design is made, could be constructed in a good many plants, because each engine is the same size; they do not vary like the steam engines.

Senator JONES. That will be a very valuable suggestion to consider.

Senator RANSDELL. What do you think about the comparative resisting power of this concrete vessel with respect to submarine attacks and the attacks of torpedoes? How does its power to resist compare with a steel vessel.

Mr. PILLSBURY. I want to say I am not an expert in concrete work. I do not imagine there would be a great difference.

Senator RANSDELL. According to Mr. Robinson, who seems to understand that very thoroughly, there would be an enormous advantage in the concrete vessel. You heard what he said?

Mr. PILLSBURY. Yes, sir; I heard what he said.

Senator RANSDELL. If he is correct in that and the vessel can be constructed quickly, I should say it is our duty to do so without question.

Mr. PILLSBURY. I am willing to yield to his better knowledge of concrete work.

Senator RANSDELL. You have never investigated that at all?

Mr. PILLSBURY. No, sir.

Senator NELSON. My understanding, Capt. Pillsbury, is that they have—and that is the beginning of concrete shipbuilding—in Denmark a couple of concrete ships between 2,000 and 3,000 tons to be operated with these Diesel motor engines. Do you know anything about that?

Mr. PILLSBURY. No; I have seen brief reports in the papers, but not full reports.

Senator NELSON. And then there is a small yard started in Norway, and they have built one small ship, which, as I think Mr. Robinson stated here, is a 500-ton ship. That is all I know of—real ships—that have been built, outside of this one that is being built out in your port there.

Mr. PILLSBURY. That is all I know of, myself, besides that one.

Senator NELSON. I mean "real ships." I am not referring to lighters and that kind of boat—but I only know of those ships in Denmark and one little ship in Norway, outside of this one.

Mr. PILLSBURY. That is all I know of.

Senator RANSDELL. When you speak of "lighters," now, what do you mean?

Mr. PILLSBURY. Vessels without any power—just for conveying cargo from ships to wharves in harbors.

Senator RANSDELL. They move to and fro in the water, do they not?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. Something like what we call, in a small way, a scow.

Mr. PILLSBURY. A barge or a scow or canal boat.

Senator RANSDELL. Do they give satisfaction for that purpose?

Mr. PILLSBURY. So I have understood.

Senator RANSDELL. There is no difference in principle between a concrete lighter and a steel lighter; if they operate successfully in one instance would they not operate successfully in another?

Mr. PILLSBURY. I should think so.

Senator HARDING. This ship goes to sea and encounters all kinds of weather, while the lighter avoids any risk of extreme weather and rough weather.

Mr. PILLSBURY. Yes; there is that difference.

Senator HARDING. I wanted to ask you, does the rigidity or flexibility cut any figure in the practicability of these concrete ships?

Mr. PILLSBURY. That is an element that should be considered. I have no doubt that the experts have considered that. The steel hulls are very elastic; they will stand quite a large sag without any injury, and they are constantly changing their form as they go up and down upon the sea. How that will affect the concrete I can not answer, but I have no doubt it has been taken into consideration, and if, as Mr. Robinson says, the concrete is equally flexible, that would answer it.

The CHAIRMAN. Are these Diesel engines being used in overseas trade very much?

Mr. PILLSBURY. Yes, sir; the Danes have for the last four or five years operated Diesel engines on ships up to 10,000 tons dead-weight very successfully.

The CHAIRMAN. For long voyages?

Mr. PILLSBURY. For long voyages, and the Norwegians latterly—the Shipping Board, through me, in December or November, chartered the *George Washington*, which was lying in San Francisco Harbor, a vessel of 9,400 tons dead-weight capacity. That vessel consumes only 10 tons of fuel oil every 24 hours and makes nearly 11 knots speed. If she were a coal burner she would burn 40 or 50 tons of coal.

Senator RANSDELL. How much oil would she burn as an oil burner?

Mr. PILLSBURY. If an oil burner she would burn about 200 barrels and that would be about 30 tons of oil.

Senator RANSDELL. That is an immense saving in fuel, then?

Mr. PILLSBURY. And that is why I recommend that if the concrete ships are to be built that at the same time an American Diesel engine should be built which would make the consumption of fuel on those vessels only about 7 tons per day instead of 35 tons of coal.

Senator JOHNSON. How much of a sailing radius has the *George Washington*?

Mr. PILLSBURY. About 30,000 miles in her double bottoms, leaving all holds free for cargo.

Senator NELSON. They have several ships, do they not, both in Norway and Denmark, that they use these engines in?

Mr. PILLSBURY. I think there must be close on to 20 ships; so that it is no longer an experiment.

Senator NELSON. So far as those motors are concerned?

Mr. PILLSBURY. No, sir.

Senator RANSDELL. Is there any reason you know of, why Diesel engines should not be operated over 10,000 tons? You say they have worked it up to 10,000.

Mr. PILLSBURY. I think not. I had quite a long talk with the chief engineer and the captain while they were in the harbor, and they thought there was no limit. These were twin screw ships, and each engine developed 1,700 horsepower.

Senator JOHNSON. Is there a great saving of space by reason of using the Diesel engines?

Mr. PILLSBURY. It saves space because there is no boiler, and I suppose they must save 25 feet in the length of the vessel.

Senator RANSDELL. It must save a great deal in the weight, does it not?

Mr. PILLSBURY. It saves the weight of the boilers and the weight of the water that the boilers use.

The CHAIRMAN. Does the *George Washington* operate on the coast?

Mr. PILLSBURY. She is on a voyage from San Francisco to Manila.

Mr. DENMAN. May I put a question to the witness about the Diesel engine?

The CHAIRMAN. Yes.

Mr. DENMAN. I have been told by the people interested in the *George Washington*—I represented those people for some time out there——

Mr. PILLSBURY. Yes, sir.

Mr. DENMAN. That there is a saving in space of equivalent to 3,000 tons in cargo, using ordinary fuel for runs between ports, due to lessening of fuel carriage and increased space within the vessel itself—I am not speaking of dead-weight; I am speaking of space.

Mr. PILLSBURY. By reason of not having boilers?

Mr. DENMAN. Yes. What would you say as to the possibility of that?

Mr. PILLSBURY. I think that would depend, Mr. Denman, somewhat upon the length of the voyage.

Mr. DENMAN. They were figuring on taking the supply of fuel for that round-the-world voyage, which, of course, would be smaller than filling all the water compartments with ballast and oil. Of course, the increase in dead-weight is not so great that the increase in space measurement would bring the vessel up to 12,000 or 13,000 capacity.

Mr. PILLSBURY. I think that perhaps may be so—the saving is very considerable in the operation of a Diesel engine ship.

Mr. DENMAN. The relevancy, gentlemen, is this: The cargoes are very often much lighter than the actual carrying capacity of the ship, and your ship will be filled up with lightweight cargo of great value to the commerce without having your increased dead-weight. Anything that adds to the space on the vessel is of enormous economic value in the carrying capacity of the ship, and where, as in this war, we are seeking space as well as dead-weight, it may be that before the war is over if it hangs on as long as it seems, that the Diesel type of engine will have direct war service in giving the increased tonnage for the same number of ships.

The CHAIRMAN. Would it take special trained men, very expert men, to operate the Diesel engine?

Mr. PILLSBURY. It would not. I would think an intelligent engineer could go into the shops while those engines were being constructed and then see then installed in the ship, and then I think he would be competent to operate them.

The CHAIRMAN. I have been told that that was one difficulty—that it required very expert engineers to operate those engines, and that it was difficult to get the men to do it.

Mr. PILLSBURY. The Danes have the practice of taking their chief engineer and first assistant engineer, who have been on steamers, and sending them to the erecting or construction shops for a period of about three months before the engine was ready to go into the ships, and then they go on the ships in their respective capacities. That is the experience they have, where previously the engineers have been on steamers.

The CHAIRMAN. I will ask you that question again: Were there any delays out there by reason of changes in designs and specifications?

Mr. PILLSBURY. I think no material delays.

Senator NELSON. Capt. Pillsbury, you are familiar with the shipbuilding program of the Government out there in your district. How are the ship builders getting along with respect to time; are they going to get their ships built in the time provided in the contracts, or are they behind?

Mr. PILLSBURY. They are a very little behind by reason of the delay in the receipt of the material last year, up to November; but from this on I think there will be no further delay.

Senator NELSON. How much time did they lose by that?

Mr. PILLSBURY. They have lost about two months' time.

Senator NELSON. Two months' time?

Mr. PILLSBURY. Yes, sir; up to the 1st of January.

Senator NELSON. Can they make up some of that lost time?

Mr. PILLSBURY. They may make up a little, I think; there will be no further loss of time.

Senator NELSON. Did that loss of time affect all the yards?

Mr. PILLSBURY. It affected all the yards; yes, sir.

Senator NELSON. So that they are practically all behind time?

Mr. PILLSBURY. And I should say that strike of two weeks was included in that two months, so it really was not a serious loss of time, because it was material that would have delayed.

Senator JOHNSON. Do you contemplate a further loss of time in getting the machinery?

Mr. PILLSBURY. Yes, sir; in some instances. There are ships afloat there now in Los Angeles and also in San Francisco that are waiting for machinery.

Senator JOHNSON. Very evidently there is going to be delay in getting the machinery, is there not?

Mr. PILLSBURY. I think, as near as I can tell, that the delay will not last more than two or three months, until about the 1st of April, and then the machinery and boilers will be coming around as the ships require.

Senator HARDING. Is that transportation or production delay?

Mr. PILLSBURY. I think it is production delay. The turbines that were required for two ships already launched in Los Angeles and some of the Moore & Scott ships have not left the East yet, although they should have been out there from three to six weeks ago.

The CHAIRMAN. Have you any suggestion, Captain, that you can offer us that would be of any assistance in speeding up or help in any way.

Mr. PILLSBURY. I do not know, Senator. I did not know until to-day that I would appear before the committee, and I had not made any preparation for it. It looks to me as if the Emergency Fleet Corporation is handling things now very well. It is a tremendous undertaking to inaugurate a corporation of this magnitude and start out to deliver 5,000,000 or 6,000,000 tons of ships a year, whereas three years ago we were only turning out one-tenth of that. I think the output of tonnage after July will be reasonably satisfactory.

Senator NELSON. One more question: Do you have any difficulty about housing the employees out there in any of the yards?

Mr. PILLSBURY. There probably will be some difficulty around Los Angeles yards. San Francisco is so well built up, and also Oakland, that there is no real difficulty. The men are used to going quite a distance from their work, sometimes as much as 5 or 6 miles on a 5-cent street car fare; and sometimes crossing the bay; the San Francisco people going to Oakland and the Oakland people going to San Francisco. So they are used to that, and there is no real shortage in housing around San Francisco. But in the San Pedro and Los Angeles yards there is.

Senator NELSON. The harbor is away down at San Pedro?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. And it is quite a distance up to Los Angeles?

Mr. PILLSBURY. Yes, sir.

Senator NELSON. What is the distance there?

Mr. PILLSBURY. It is just a little over 20 miles.

Senator NELSON. And the only place where they can get plenty room is in Los Angeles?

Mr. PILLSBURY. There is plenty of land, but not houses.

Senator NELSON. So they really need houses there at San Pedro?

Mr. PILLSBURY. I think there is need for it at San Pedro.

The CHAIRMAN. We are very much obliged to you, Captain.

Mr. PILLSBURY. I am very glad to have been here.

The CHAIRMAN. I want to put in the record at this point a letter received from Mr. Piez, vice president and general manager, making some few corrections in the record, to be incorporated, I take it.

(The letter here referred to is printed in full, as follows:)

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, January 24, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman Committee on Commerce,
United States Senate, Washington, D. C.

MY DEAR SENATOR: I beg to invite attention to errors in printing which occur on page 723 of the hearings before your committee "to investigate all matters connected with the building of merchant vessels under direction of the United States Shipping Board, Emergency Fleet Corporation," on January 8, 9, 10, 11, and 14, 1918. The salary of Mr. Frank A. Browne, general purchasing officer, should be $7,200 per annum, and the salary of Mr. F. C. Joubert, manager division of transportation, should be $3,600 per annum; also the footnote "Should appear under 'division of labor'" applies only to the name of Mr. J. Stewart Brand, secretary to manager division of labor.

I have to request that the corrections indicated be made a part of the record.

Yours, very truly,

CHARLES PIEZ,
Vice President and General Manager.

The CHAIRMAN. I have here a report on the condition of the fabricated ship yard at Hog Island which has just been sent in.

Senator NELSON. Had we not better put it in the record? It is very important.

Senator JONES. It is very important. I have scanned over if, and it discloses a very serious situation.

The CHAIRMAN. We better put this in the record.

Senator JONES. We may want those who made the report to come before the committee.

(The statement referred to and three drawings attached thereto are here printed in full, as follows:)

REPORT OF CONDITION OF THE FABRICATED SHIPYARD AT HOG ISLAND.

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, January 22, 1918.

The contract with the American International Corporation was signed on the 13th day of September, 1917, and provided that the American International Corporation was "to construct and thereafter during the continuance of the contract, maintain such buildings, building slips, camp, commissary, hospital, plant, and appurtenances as may be necessary for the establishment of a shipyard and for the construction of 200 vessels, in accordance with the aforesaid plans. The arrangement of buildings, building slips, camp, commissary, hospital, plant, and appurtenances shall be in accordance with the plans and schedules to be mutually agreed upon by the parties hereto, and the construction thereof shall be subject to the inspection of the owner." Under the contract the Government reserved the right by written order given to its agent, at any time within 60 days after the date of the execution of the contract, to reduce the proposed shipyard to such size and capacity as might be necessary for the construction of 50 vessels only. The American International Co. submitted certain general plans and an estimate of cost amounting to $21,000,000, but it did not guarantee the accuracy of this estimate, nor was any limit of the cost of plant

installation imposed on them, except that inherent in the right of the fleet corporation to supervise and direct the work. The estimate was dated June 29, and apparently accompanied a general plan which differs in certain essential respects from the final plan adopted. A progress chart submitted at the time specifies that "the program for the construction of the shipways calls for the completion of the first way four months from the time work is started and the completion of the fiftieth way about 25 days later. It was also stated that this rate of progress made it possible to lay down the first keel at the end of four months and to lay down two keels per day thereafter. The American International Corporation was ordered to proceed with the construction of 50 fabricated ships of 7,500 deadweight tons capacity. These ships were cargo carriers of a standardized type with a speed of about 11 knots. On October 3, and after some negotiation, the original plan of contracting for 200 ships, all of the same type and size, was modified, and the International Corporation were awarded a contract for 70 combined troop and cargo ships, having a speed of 15 knots and a dead-weight capacity of 8,000 tons.

The actual work of constructing the shipyard was begun on October 1, and its state of completion at the present time is indicated by the attached charts. Several factors have conspired to greatly increase the estimated cost.

First. The plant was begun so late in the fall that much of the heavy construction work had to be done under the handicap of severe winter weather.

Second. The location of the plant was such that the railroad facilities supplied by the district were unequal to the needs of the construction work.

Third. The location is so isolated and passenger handling facilities leading to it so inadequate that experienced workmen have not sought permanent employment there.

Fourth. The means of handling construction material within the plant site were not made the first order of construction and inadequate driveways and insufficient railroad trackage during the early stages of the work have proved fruitful sources of delay and expense.

Fifth. Material seems to have been ordered without that regard for actual needs and existing facilities of handling that is necessary to prevent undue congestion of railroads leading to the plant.

Sixth. In the desire for speed men have been taken on in such great numbers that the supervising staff was unequal to the task of effectively directing the workers, with a consequent great loss of output and efficiency. Lower costs and at least equal if not greater progress could have been made if the working force had been kept down to more moderate proportions.

We were told by one of the employment men at Hog Island that somewhere between 500 and 1,000 men are hired there every day. Assuming the lower figure as the average, there exists a labor turnover of almost 100 per cent a month—a condition fatal alike to progress and to costs. Great masses of men can not be brought together for effective work on so complicated a construction problem as Hog Island, unless the supervision is considerably more effective and the attendant conditions considerably more favorable to the prosecution of the work than has been the case at this yard.

Just a few comparisons will show the trend of the costs. The completed work on the second group of ways has thus far cost $286,752.76, against an estimated cost of $145,124.74.

The cost of driving 16,252 piles up to December 31 was $513,163, against an estimated cost of $89,386, an increase of 574 per cent.

The cost of grading 102,000 cubic yards up to December 31 was $90,056.13 against an estimated cost of $51,000.

Temporary roads thus far constructed have cost $238,801.48 against an estimated cost of $100,000.

Temporary buildings, temporary telephones, and temporary railroads, for which no provision was made, in the estimate, have cost $698,269.17.

It is certain that the total cost of the plant completed on the present plan and at this rate of cost will exceed the original estimate by more than 100 per cent, but setting aside the question of cost which, in this great crisis is, after all, a subordinate one, it is necessary to inquire whether this expenditure will bring results within the time of our necessity. Our imperative needs are for tonnage within the first eight months of the present year and our program must, of necessity, bend itself to these needs. A vast program of yard construction on an elaborate plan with a large prospective output in 1919 and 1920 can, under present labor, material, and transportation conditions, be carried on only at the direct disadvantage of our immediate ship-producing capacity.

The task at Hog Island is not merely that of constructing a huge shipyard, larger manyfold than any heretofore existing, but it involves the equally great and time-

consuming task of supplying and training 30,000 men to properly use the facilities there planned. Given sufficient time, both of these tasks could be accomplished and Hog Island would stand the greatest ship-producing plant of all the world, but measured by the needs of our immediate necessity, judged by the standard of greatest possible output in 1918 and the first half of 1919, my judgment is that we will turn out more ships if we finish the 32 ways thus far begun, together with that portion of the remainder of the plant which is tributary and essential to this number of ways, and then begin the actual work of ship construction. The remainder of the plant can be completed if the progress of ship construction has demonstrated the capacity of a single management and a single location to yield the expected output. Shipyards, like other plants, may be so large that they will produce undue stress on the labor supply and the transportation facilities of the locality and they may, on that account, be highly vulnerable to a failure of either. Judging by the conditions at Hog Island, particularly after a study of the progress made at other plants begun at about the same time, one is forced to the conclusion that Hog Island was laid out on too grand a scale; that the site, considering cost, speedy completion, and accessibility, was badly chosen; that the yard should have been devoted to the construction of but a single type of vessel instead of imposing upon a new organization the task of completing two radically different types of vessel, and that the construction work should have been concentrated on a quarter of the complete plant so that this quarter might have been immediately available for the construction of vessels, thus affording an opportunity of training up an organization, which could have been effectively expanded as the remaining portions of the yard were completed. From such investigation as we have been able to make it appears, too, that vessels of the Isherwood type of construction would have lent themselves better to the methods of fabricating yards than do vessels of the fish-bone type.

At our request, the American International Corporation has consented to postpone the completion of 18 ways not yet begun and to omit the installation of such trackage and buildings as would serve these 18 ways until the progress of actual ship construction at the plant will justify the completion in accordance with the present general plan of the yard.

The second Government yard for the construction of the so-called fabricated ships is located at Bristol, Pa. The Merchant Shipbuilding Corporation is the agent in this case and contract was entered into on substantially the same basis as in the case of the American International Corporation on September 7. The contract in this case covered the construction of 40 cargo carriers of 9,000 dead-weight tons capacity with a speed of 11 knots, and this number has since been increased to a total of 60 vessels of the same type. The plant consists of 12 ways and is estimated to cost about $10,000,000. Very satisfactory progress has been made and work on actual ship construction will begin in the course of a very few weeks.

The third Government plant is located on Newark Bay, N. J., covers 28 ways, and the total estimated cost is about $11,000,000. The contract was signed on September 14 with the Submarine Boat Corporation, who in this case is the agent of the Emergency Fleet Corporation. The contract covers the construction of 150 cargo carriers of 5,000 tons capacity, with a speed of 10 knots. Progress at this plant has also been very satisfactory, though the severe winter conditions have made it impossible to begin the work of dredging, of which there is a total of about 3,000,000 cubic yards. Delay from this source may ensue unless weather conditions grow more favorable.

A survey of the conditions at both Bristol and Newark Bay but accentuates the impression gained at Hog Island that the progress made at that yard thus far has been far from satisfactory.

The Government yards cover a very considerable portion of the shipbuilding program laid down by the Emergency Fleet Corporation and the early completion of these yards and their effective utilization, after completion, are absolutely necessary to the quick accomplishment of our task.

The Merchant Shipbuilding Corporation controls the yard of the Chester Shipbuilding Co. and the management has shipbuilding capacity and experience.

The American International Corporation, our agent at Hog Island, controls the New York Shipbuilding Co. and may, therefore, be able to draw on that company for shipbuilding experience.

The Submarine Boat Corporation has had experience in the construction of small vessels, but has not, to my knowledge, had any experience in the construction of large cargo carriers.

Unquestionably, when the actual work of ship production in these Government yards begins, the Emergency Fleet Corporation will be under the necessity of exercising a considerably greater degree of supervision and direction than has thus far been the case. The yards have an enormous capacity, the fees paid our

operating them are only a fractional part of the profits demanded by other shipbuilders, and if the yards are effectively operated the Government will be reimbursed for the large plant investment by extremely favorable costs, but this end will only be achieved by assuming more positive control of procedures, methods, and expenditures than we have heretofore done.

Respectfully submitted.

CHARLES PIEZ,
Vice President and General Manager.

WAR DEPARTMENT,
CORPS OF ENGINEERS, UNITED STATES ARMY,
OFFICE OF THE DIRECTOR GENERAL OF RAILWAYS,
Washington, D. C., January 18, 1918.

Mr. E. N. HURLEY,
Chairman United States Shipping Board,
Washington, D. C.

DEAR MR. HURLEY: I give you my impressions of the trip yesterday for such use as you may care to make of them.

First, in my judgment the work should have been started with the idea of building the yard in sections, say 10 ways in a section. Then they could lay the keels and commence the construction of the ships in the first section before the second was completed, and possibly be launching ships before the last was completed.

This would have been better, I think, than scattering the men all over the yard nibbling at everything and doing nothing. Objection to this program may be made on the ground that the shops and facilities for work on the hulls would not be ready, but I see no reason why the work should not progress in the same way for, failing in its completion, the fabrication in part could be done by outside shops temporarily.

The next thing that occurs to me is that entirely too extensive a layout has been attempted in the way of tracks and yard facilities. While the yards and locations are not objectionable, the number of tracks is unnecessary, and my thought is even now to lay only such tracks in those yards as seem to be required for the immediate work on hand. Then it is a very simple matter to add additional tracks right on the present plan to meet any expansion in the business; in that way saving cost of original construction.

I watched the men congregated at different points around the yard, and I should estimate that possibly between 5 and 10 were working out of every gang of 100. I never in my life saw such idleness. Of course, we know the conditions under which labor is employed and we expect inefficiency, but I believe smaller gangs and more foremen would remedy the defect to a great extent, but good foremen should be selected. Half of the men we saw at work, organized in proper size gangs, would have done more work than all the men that were there the day of our visit.

The waste and inefficiency can only be explained by the fact, as I understand it, that there is no penalty whatever imposed upon the contractor for excessive costs; no limit to expenditure has been fixed, and he is entirely indifferent as to the amount of money expended. As an illustration of what might be termed extravagance in the employment of labor, my brother, who has charge of labor in Philadelphia, told me that the wages paid had thoroughly demoralized the labor market in Philadelphia, and had brought there so many men that there was no way to accommodate them. On one night recently they actually had to put them in the vacant cells in the police stations to sleep. This certainly shows a lack of head to the whole program.

I have had occasion to be quite interested in the subject of piling in the last month, as you know, and I must say whoever inspected the piling that has been going to Hog Island ought to be called to account, or else the specifications should be revised, because there were many piles there that were not fit to be driven.

The use of tie-plates on the tracks in the yard, to my mind, should be stopped. These tracks are put down for a temporary purpose. Tie-plates are used for permanent tracks where high speed trains or very heavy traffic is handled, and only in yards for switching loads where very heavy work is done and to prevent the track from spreading. I did not see any conditions at Hog Island that would require the use of the plates. If the yard was operated for three or four years then they might be added, and not before that time. The excuse was offered that there were so many bad ties, but I did not see any bad ties. If there were, it certainly is a pretty bad excuse.

Yours, very truly,

S. M. FELTON.

HOG ISLAND UNIT COSTS TO JANUARY 1, 1918.

JANUARY 18, 1918.

Memorandum for the vice president and general manager:.

I hand you herewith Resident Engineer Reed's letter of January 17, and accompanying statement of total unit cost for certain items of work at Hog Island, to January 1.

These figures show that up to the present time the work has been costing several times the estimated unit cost. From reports which have been received during the past three months from Philadelphia in regard to the methods pursued by our agents, the American International Shipbuilding Corporation, I can not but feel that a considerable part of this excessive cost is due to the fact that our agents have no incentive under the present contract to complete the plant within their original estimate of $21,000,000.

The situation is, in my opinion, a grave one from the financial end, and it would seem to me that radical retrenchment as regards unit cost should be effected by our agents at once, or they should be offered the alternative of being required to accept a supplemental agreement that would give the Emergency Fleet Corporation a more direct control over the way in which the money is being spent, or we should require the American International Corporation to agree to a limit of plant cost for the Hog Island work, with the proviso that they would receive a portion of any savings therefrom, and that the Emergency Fleet Corporation might share with them on some percentage basis any excessive cost over the limit fixed.

These suggestions are offered at this time for your consideration, with a view to their adoption at such time as you think proper.

In my opinion the costs given in the accompanying papers can not be defended or explained satisfactorily.

H. H. ROUSSEAU,
Manager, Division of Shipyard Plants.

UNIT COSTS.

JANUARY 17, 1918.

Admiral H. H. ROUSSEAU,
Manager Division of Shipyard Plants,
Emergency Fleet Corporation, Washington, D. C.

DEAR SIR: There is inclosed an analysis of actual costs as compared, with estimated costs for various items of work to January 1, 1918, as compiled by Plant Engineer John W. Towle from the records of the American International Shipbuilding Corporation. * * *

On the other hand, it should be recognized that the actual costs include many preliminary expenses involved in getting the plant and organization on the ground and in running order, which should properly be spread over the whole work instead of being absorbed in the work already done.

It is believed that the costs given are below rather than above the actual, as it is probable that items of cost have been omitted rather than extraneous items inserted. It will be understood that with the methods of accounting employed no great accuracy in the distribution of material costs is to be expected.

Yours, truly,

P. L. REED,
Resident Engineer, United States Shipping Board,
Emergency Fleet Corporation

Hog Island Shipyard unit and total costs up to January 1, 1918.

SHIPWAYS.

Group No. 1. Snare & Triest, contractors:

Piling—

In estimate, each	$15.50
Average cost delivered Hog Island	$10.00
Reserved for cost of driving	$5.50
Total piles driven to date	6,668
Total cost to Dec. 31	$146,474.33
Estimated cost, 6,668 piles, at $5.50 each	$36,674.00

Cost per pile, $21.96, 3.9 times estimate. For December, cost per pile was $20.60, 3.7 times.

Group No. 2. Raymond Concrete Pile Co., contractors:

Estimated cost of completed work—

Wood piles, 847, at $5.50	$4,658.50
Concrete piles, 2,149, at $55	118,195.00
Concrete, 901.2 cubic yards, at $11	9,913.20
Capps, 18,208 feet b. m., at $90	1,638.72
Stringers, 29,876 feet b. m., at $70	2,091.32
Decking, 29,298 feet b. m., at $60	1,757.88
Cross bracing, 2,810 feet b. m., at $20	210.75
Excavation, 645 cubic yards, at $0.35	225.75
Reinforcing, 43 tons, at $90	3,870.00
Forms, 85,454 square feet, at $0.03	2,563.62
Total	145,124.74

Actual cost—

Concrete piles	178,127.84
Excavating	5,293.95
Concrete work	26,727.44
Lumber for forms and capps, etc	63,518.31
Steel and iron	13,085.22
Total actual cost	286,752.76

Group No. 3. Jarrett-Chambers Co., contractors:

Total piles driven to date	2,244
Total cost to Dec. 31, 1917	$137,665.81
Estimated cost, 2,244 piles, at $5.50	$12,342.00

Cost per pile, $61.34, 11.1 times estimate.

Group No. 4: Hugh Nawn, contractor:

Total piles driven to date	4,665
Total cost to Dec. 31, 1917	$149,716.37
Estimated cost, 4,665, at $5.50	$25,657.50

Cost per pile, $32.09, 5.8 times estimate.

Group No. 5: Arthur McMullen, contractor:

Total piles driven to date	2,675
Total cost to Dec. 31, 1917	$79,306.49
Estimated cost, 2,675, at $5.50	$14,712.50

Cost per pile, $29.64, 5.3 times estimate.

Grand total, groups Nos. 1, 3, 4, 5:

Total piles driven to date	16,252
Total cost to Dec. 31, 1917	$513,163.00
Estimated cost, at $5.50 each	$89,386.00

Cost per pile, $31.57, 5.74 times estimate.

General.	Estimated.	Cost to Dec. 31, 1917.
Cost of clearing	$15,000.00	$20,059.65
Temporary roads	100,000.00	238,801.48
Temporary buildings	(1)	611,562.91
Temporary telephone	(1)	14,184.45
Temporary railroads	(1)	72,521.81
Administration building	105,400.00	90,484.87
Garage	45,000.00	45,874.78
Hospital	28,000.00	23,906.22
Fire station	15,300.00	22,991.36
Workmen's quarters	218,000.00	235,529.32
Foremen's quarters	59,000.00	52,658.54
Shuttle line	64,900.00	83,695.63
Water supply	239,000.00	223,569.15
Sewer and sewage disposal	231,000.00	224,122.60
Fire protection	298,000.00	83,143.24

[1] None.

Grading:

Cubic yards moved to date, 102,000, at 50 cents, estimated	$51,000.00
Actual cost of same	90,056.13

NOTE.—Many of the above accounts are still open and work progressing on same. Also many items not yet distributed that will show up during the current month.

The CHAIRMAN. The committee will now go into executive session.

(Thereupon, at 4.45 p. m., the committee proceeded to the consideration of executive business, and, at 5 o'clock p. m., adjourned to meet at 2 o'clock p. m. Monday, January 28, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

MONDAY, JANUARY 28, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., Hon. Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Martin, Bankhead, Nelson, Jones, Harding, Sherman, Johnson, and Calder.

The CHAIRMAN. The committee will come to order.

I have here, in three parts, some correspondence and documents sent, at the committee's request, by Mr. Piez, manager of the Fleet Corporation.

(Upon motion the matter referred to above was ordered incorporated in the hearings, and is as follows:

CLINCHFIELD NAVIGATION CO. (INC.),
New York, January 17, 1918.

Admiral F. T. BOWLES,
United States Shipping Board Emergency Fleet Corporation,
Washington, D. C.

DEAR SIR: In compliance with your telephone request, we inclose herewith copies of the several letters exchanged with Mr. Theodore E. Ferris, which cover the arrangements made by this company with him and the payment of his fees for his services to us employed as our naval architect and engineer on the commercial vessels to be built for our company. It is not, of course, usual, and certainly is not our practice to give out the details of such private arrangements, but we feel in view of your request that you entitled to have this information.

It also occurs to us that you may wish to have information on the agency agreement we have with the Sloan Shipyards, with its cancellation received today, so we inclose copies thereof.

Very truly, yours,

CHARLES E. BOOTHE, *President.*

SEATTLE, WASH., *January 7, 1918.*

CLINCHFIELD NAVIGATION CO. (INC.),
24 Broad Street, New York City.

DEAR SIRS: This is to notify you that the agreement signed by the Sloan Shipyards Corporation under date of April 11, 1917, will be canceled in April, 1918.

Very truly, yours,

SLOAN SHIPYARDS CORPORATION,
PHILIP D. SLOAN, *President.*

NEW YORK, *April 21, 1917.*

CLINCHFIELD NAVIGATION CO. (INC.),
New York.

DEAR SIRS: This will confirm the understanding we have reached whereby you are to represent the Sloan Shipyards Corporation, and its associate interests, in the sale of their output for a commission of 5 per cent of the selling price.

We are to keep you informed as to any inquiries which may reach us direct, so that you may follow them up.

It is understood that, while continuing to represent us, you are not to accept the representation of any competitive wooden-ship builder on the Pacific coast of the United States.

This arrangement shall continue for one year from this date, and thereafter shall be subject to three months' notice in writing of cancellation by either company.

Yours, very truly,

SLOAN SHIPYARDS CORPORATION,
PHILIP D. SLOAN, *President.*

Accepted:
CLINCHFIELD NAVIGATION CO. (Inc.)
CHAS. M. BARNETT, *Vice President.*

APRIL 20, 1917.

MR. THEODORE E. FERRIS,
New York City.

DEAR MR. FERRIS: Your letter of April 16, in regard to additional compensation to be paid you in connection with the building of four wooden motor ships. I consider your suggested charge of $4,800 for the preparing of additional plans and drawings not contemplated when we made the original agreement with you, as a fair and reasonable one, and I am very glad to confirm this agreement and will make payment to you at any time on the rendering of a bill.

Yours, very truly,

C. E. BOCKUS, *President.*

NEW YORK, *April 16, 1917.*

MR. CHAS. E. BOCKUS,
President Clinchfield Navigation Co., New York City.

DEAR MR. BOCKUS: Referring to your favor of the 7th instant in reference to my services in connection with four wooden motor ships to be built for your company. In regard to the last paragraph of your letter in which you have very nicely referred to the understanding that I will be obliged to prepare more plans than was originally thought to be necessary, and as the preparing of such plans is for the protection of your interests, you are to pay me such reasonable sum in addition for this additional service as we mutually agree upon, I thought it well at this time to go further into this matter.

I have been looking into the additional cost of these plans which constitute the list attached, and feel in view of these strenuous times and the difficulty of getting skilled draftsmen, particularly as it is more or less temporary employment and further that this work has to be expedited most rapidly, it will entail a cost of approximately $4,800.

I shall be glad to have you let me know if you feel that this will be satisfactory to you.

Respectfully, yours,

THEO. E. FERRIS.

APRIL 7, 1917.

MR. THEODORE E. FERRIS,
New York City.

DEAR MR. FERRIS: For the supervision of the construction of the four motor ships to be built for our company by the Sloan Shipyards Corporation, you are to be paid $24,800 in eight installments of $3,100 each; two of which have already been paid, the third will be due May 1, 1917; the fourth June 1, 1917; the fifth July 1, 1917; the sixth September 1, 1917; the seventh November 1, 1917; and the final payment for the completion of the fourth ship. It is also agreed in case of making any material changes in these ships which may entail additional work in the way of additional specifications preparing changes in plans, specifications, etc., or if the ships are materially delayed in completion, additional compensation is to be given you, which to be agreed upon between us.

It is further our understanding, that as you have been obliged to prepare more plans than was originally thought to be necessary, and as the preparing of such plans is for the protection of our interests, we are to pay you such reasonable sum in addition for this additional service as we mutually agree upon.

Very truly, yours,

CHAS. E. BOCKUS, *President.*

NEW YORK, *April 6, 1917.*

Mr. C. E. BOCKUS,
President Clinchfield Navigation Co. (Inc.),
New York City.

DEAR MR. BOCKUS: Now that the four motor ships to be built for your company by the Sloan Shipyards Corporation have been settled up and you have also very kindly made payment to me of the first and second installments of my fee, would it not be in order for me to have a letter from you in confirmation or rather acceptance of my proposition of February 13, 1917, for services to be rendered to your company in connection with these ships?

It will be necessary in the reasonably near future to make arrangements to place a resident inspector at Olympia in fulfillment of my agreement with you to furnish this service.

I wish also soon to reach an understanding with you concerning a vast number of detail drawings which we are to prepare for these ships, and about which I spoke to you the other day. Originally I did not expect to take this work in hand, it being the usual custom for the builders to submit these details for approval. Wooden shipyards, however, usually have no drawing room staff and, as we agreed, it would be better for us to prepare the drawings, for which you said you would compensate me. This work will involve considerable expense to me in additional help, particularly as the work must be done as quickly as possible.

I shall plan to discuss and conclude this matter with you at an early date.

Respectfully, yours,

THEO. E. FERRIS.

MARCH 31, 1917.

Mr. THEODORE E. FERRIS,
New York City.

DEAR MR. FERRIS: Referring to the services to be rendered by you to this company as naval architect and engineer, also as our representative in the planning and building of four wooden steamers, in accordance with contracts dated March 31 between the Sloan Shipyards Corporation and this company, ships *Nos. 5, 6, 7,* and *8,* each vessel to cost $385,000, or a total of $1,540,000.

This will confirm our understanding that you will, for a compensation of 2 per cent of the total price of the four vessels, or a fee of $30,800, render services to this company in preparing model and lines for these ships together with arrangement plans, also layout of propelling machinery, approve and pass upon all plans submitted by the builders, consult and advise with us, handle correspondence and other negotiations with the builders, acting as our representative, and further superintend the building of the ships and machinery, maintaining at your expense a resident inspector on the work.

The above fee is to be paid to you in installments similar to our arrangement covering your fee on the wooden motorships which are building at the same yard.

It is understood that the four steamers referred to herein are to be duplicates, and that the hulls will be built and machinery installed at the same yard on Puget Sound in close proximity to Seattle.

It is further understood that we have an option from the Sloan Shipyards Corporation for 12 additional duplicate steamers, and that in the event of our closing a contract for these additional vessels, you will perform similar services in regard to such steamers; but your compensation on these additional steamers will be reduced to 1 per cent of their total cost.

We will thank you for a written acceptance of the above understanding.

Yours, very truly,

CHAS. E. BOCKUS,
President.

NEW YORK, *April 3, 1917.*

Mr. C. E. BOCKUS,
President Clinchfield Navigation Co., New York.

DEAR MR. BOCKUS: This will serve as an acknowledgement of your letter of March 31, in reference to my compenastion for the planning and building of wooden steamers and the rendering to your company of services as your naval architect and marine engineer.

The terms stated in your letter of March 31 as to the four wooden ships are satisfactory and are accepted.

In reference to the option on 12 additional duplicate steamers which you have in hand from the Sloan Shipyards Corporation, and in the event of your closing contract for these additional vessels, I note your wish that I perform similar services in the planning and building and acting as your naval architect and marine engineer, for which you set my compensation at 1 per cent of the total cost. While this is less than my usual compensation, I will meet your wish and accept 1 per cent of the total cost, in view of the duplication of design in all 12 steamers. This rate of compensation, therefore, on the 12 additional duplicate steamers is satisfactory and accepted.

It is understood that the payments of my fee as above will be made in the same number of installments as my compensation on the four wooden motor ships which you are building at the same yard, ranging over the period of construction of the steamers.

Respectfully, yours,

THEO. E. FERRIS.

NEW YORK, *February 13, 1917.*

Mr. CHARLES E. BOCKUS,
President Clinchfield Navigation Co. (Inc.), New York City.

DEAR MR. BOCKUS: In accordance with Mr. Barnett's letter of the 9th instant, replying to mine of the 8th, stating it would be entirely satisfactory to have me write a proposition covering my services in connection with the building of four motor ships at Seattle as I usually do, which you would be glad to acknowledge, attached please find this written proposition.

Respectfully, yours,

THEODORE E. FERRIS.

NEW YORK, *February 13, 1917.*

CLINCHFIELD NAVIGATION CO. (Inc.),
New York City.

GENTLEMEN: Referring to services to be rendered by me to your company as naval architect and engineer, also as your representative in the planning and building of four wooden motor ships, in accordance with contracts under date of December, 1916, between the Seattle Dry Dock Co. and the Clinchfield Navigation Co. (Inc.), ships Nos. 1 and 2 to be delivered September 20, 1917, and ships Nos. 3 and 4 to be delivered December 4, 1917, each vessel to cost $310,000, or a total for the four ships of $1,240,000.

Confirming our understanding, for a compensation of 2 per cent of the total price of the four vessels, or a fee of $24,800, I am to render services to your company in preparing model and lines for these ships, together with arrangement plans; also layout of propelling machinery, approve and pass upon all plans submitted by the builders, as far as conditions will permit, consult and advise with you, handle correspondence and other negotiations with the builders, acting as your representative and further superintend the building of the ships and machinery, understanding that when the real construction of the vessel has progressed sufficiently I will at my expense maintain a resident inspector on the work.

The above fee to be paid to me in installments as follows:

Feb. 1, 1917	$3,100.00
Mar. 1, 1917	3,100.00
May 1, 1917	3,100.00
June 1, 1917	3,100.00
July 1, 1917	3,100.00
Sept. 1, 1917	3,100.00
Nov. 1, 1917	3,100.00
Upon completion of fourth ship	3,100.00
	24,800.00

In the event of making material changes in the ships, entailing additional work in the matter of additional supervision or preparing additional plans, specifications, etc., and further, in the event the ships are materially delayed in completion, I am to receive additional compensation on a basis to be mutually agreed upon. This is provided for because of possible extended inspection services, expenses of same, and additional work in preparing new or modified plans.

It is understood that the four ships referred to herein are duplicates and all the hulls will be built and machinery installed at the same yard.

I will thank you for a written acceptance of the above understanding.

Respectfully, yours,

THEO E. FERRIS.

FEBRUARY 9, 1917.

Mr. THEODORE E. FERRIS, *New York City.*

DEAR SIR: Referring to your letter of February 8: It will be entirely satisfactory to us to have you write a proposition as you usually do, which we shall be glad to acknowledge.

Yours, very truly,

CHAS. M. BARNETT,
Vice President.

NEW YORK, *February* [illegible], 1917.

Mr. CHARLES E. BOCKUS,
President Clinchfield Navigation Co., New York, N. Y.

DEAR MR. BOCKUS: This will serve as an acknowledgment of yours of the 9th instant referring to Mr. Stewart's letter to me of January 26, confirming our understanding with reference to our arrangement for the four wooden motor ships to be built by Mr. Sloan, of Seattle, Wash., as provided for in my agreement with Mr. A. M. Archer, under which agreement I was to receive 2 per cent of the purchase price for each of the vessels to be constructed in case four motor ships were constructed; in case only two were constructed, the payment was to be 2½ per cent of the contract price. The payments to be made in seven installments, same being under the memorandum agreement entered into in November, 1916, between myself and Mr. A. M. Archer.

I take it from your letter that you are under the impression that the agreement referred to between myself and Mr. A. M. Archer was concluded, or rather signed. However, the situation is that I signed a contract, or rather this agreement, returning the originals to Mr. Crowell; but I am not in possession of a signed copy of same, it being held up for a long time. It would therefore seem well that I receive a signed copy of this agreement, or sign another similar agreement between your company and myself; or, if you would prefer, as we usually do, I will write you a proposition, setting forth the total amount and the amount of installments referred to, and you could acknowledge receipt of same and make a complete record of this matter.

Respectfully, yours,

THEO. E. FERRIS.

FEBRUARY [illegible], 1917.

Mr. THEODORE E. FERRIS, *New York City.*

DEAR MR. FERRIS: Your letter of January 31 and Mr. Stewart's copy to you of January 26.

Mr. Stewart is exactly right in saying that the Clinchfield Navigation Co., Inc., will make exactly similar arrangements with you in regard to the four wooden motor ships to be built by Mr. Sloan, of Seattle, Wash., as are provided for in your agreement with Mr. A. M. Archer. This agreement was that you were to be paid 2 per cent of the purchase price for each of the vessels to be constructed in case four motor ships were constructed; in case only two were constructed, the payment was to be 2½ per cent of the contract price. The payments to be made in seven installments, same being under the memorandum agreement entered into in November, 1916, between yourself and Mr. A. M. Archer.

Very truly, yours,

[illegible] President.

NEW YORK, *January 27, 1917.*

Mr. J. L. STEWART,
Treasurer Clinchfield Navigation Co. (Inc.),
New York City.

DEAR MR. STEWART: This will serve as an acknowledgment of your letter of the 26th instant and beg to say it will be satisfactory when Mr. Bockus returns for our arrangement to be confirmed in connection with the matter of ships to be built by Mr. Sloan at Seattle, Wash., in the meantime it being the understanding that my arrangements with the Clinchfield Navigation Co. (Inc.) will be the same as those proposed for Mr. A. M. Archer.

Regarding your reference that you would be glad to hear from me as to how the plans, etc., of these boats are progressing, beg to say that the lines and model of the ships were sent to Mr. Sloan in accordance with the understanding I had with him. The matter was promptly dealt with, as I promised him it would be.

You will observe my attached copy of letter with Mr. Sloan that we are dealing with the machinery outfit of these boats.

With reference to further plans as settled, i. e., sizes of timbers and matters of this kind, we are now laying down the arrangement of the ships which will be proceeded with as quickly as possible. We have already prepared a machinery arrangement plan which is an important one, and this will be completed and traced as soon as we hear from Mr. Sloan in response to our letter of this date.

Respectfully, yours,

THEO. E. FERRIS.

JANUARY 26, 1917.

Mr. THEODORE E. FERRIS,
New York City.

DEAR MR. FERRIS: Your letter of January 25 relative to your arrangement with us in connection with the four wooden motor ships to be built by Mr. Sloan at Seattle, Wash.

Mr. Bockus left New York yesterday afternoon for the South, and we do not expect him here again until at least the middle of February. However, I understand that we are to make arrangements with you in this matter exactly similar to the one you had with Mr. A. M. Archer, and we are sure that Mr. Bockus will confirm this on his return. In the meantime we would be glad to hear from you as to how the plans, etc., of these boats have progressed.

Very truly, yours,

J. L. STEWART, *Treasurer.*

NEW YORK, *January 25, 1917.*

Mr. C. E. BOCKUS,
President Clinchfield Navigation Co. (Inc.),
New York City.

DEAR MR. BOCKUS: With reference to my arrangement with your company in connection with the four wooden motor ships to be built at Seattle, you mentioned that you would look up the arrangement as entered into with Mr. Archer and confirm same with me.

While there is no particular hurry about this matter, still we are active on the work of these ships and it would be very nice to get our understanding straightened out as soon as possible.

Respectfully, yours,

THEODORE E. FERRIS.

NEW YORK, *January 21, 1918.*

Admiral FRANCIS T. BOWLES,
Manager Division Steel Ship Construction,
United States Shipping Board, Emergency Fleet Corporation,
Washington, D. C.

DEAR ADMIRAL BOWLES: I am in receipt of your letter of the 17th instant requesting a written statement concerning "my relations as a naval architect for any persons doing business with the Fleet Corporation, whether for contract or requisitioned vessels, as soon as possible."

It seems to me that, strictly speaking, I have had no relatives coming within the terms of your request excepting the Submarine Boat Co. matter and the Jakobs with both of which you should be familiar. It is my understanding, however, that you also desire to be made acquainted with my relations with owners from whom the Government has purchased or requisitioned vessels.

Inasmuch as you have intimated that there has been some impropriety in such relations, and I have received the impression that you harbor a suspicion of irregularities on my part, I desire now to make a full and accurate statement. I have already endeavored to explain some of these matters from recollection, but the following statement is based upon the records in my office

SUBMARINE BOAT CO

In order to understand the situation as to this and the other matters referred to attention should be called to the character of my connection with the Fleet Corporation

I am a naval architect and engineer, with a large private practice, having my office in New York City. In April, 1917, I accepted an order from the Shipping Board to prepare general plans and specifications for a wooden cargo steamer, my fee to be $3,000. Later in the same month Gen. Goethals requested me to act as naval architect and consulting engineer for the Emergency Fleet Corporation. I stated that my private work was very large and that I was not looking for any Government work. Gen. Goethals urged, however, that it was my duty to assist the Government, and I replied that I could not afford to make any arrangement which would involve the abandonment of my private practice. He replied that it would not be necessary to do so; that I could go on with my private practice and do work for the Government just the same as for anybody else; that all I need do was to consider the Fleet Corporation as an additional client, but that it would not be possible in the Government work to arrange my compensation on a fee or percentage basis, as in the case of other clients

Finally, in view of his insistence, I made a proposition, under date of April 23, 1917, which was, in substance, to accept all Fleet Corporation work committed to me and to give the same preference in my office, and to accept a compensation of $3,000 a month in full for my fees for all such work, the cost of such work, plus 30 per cent to cover the overhead, to be paid by the Government in addition. I expressly stated in my proposal that while I would give to the Fleet Corporation work all the time I could, without specified amount, and consider it foremost, it was to be understood that I should be able to carry on my private business and continue to render future services to my clients, that the construction work now in progress for them would not be interrupted without my being informed of such interruption, and that I should be able to maintain my establishment in New York unless later developments warranted a different location, in which case different financial adjustments should be made. Gen. Goethals replied to my proposition, appointing me naval architect and consulting engineer to the Emergency Fleet Corporation, and saying that for this service I was to receive "a fixed fee of $2,500 per month for your personal services," and to be reimbursed the cost, plus 30 per cent to cover the overhead. This arrangement with the Fleet Corporation continued until September, 1917, as hereinafter mentioned. In May, 1917, I was requested by the Submarine Boat Corporation to prepare plans and specifications for a 5,000-ton fabricated ship.

It was my understanding that the Submarine Boat Corporation desired to make a bid to the Fleet Corporation on these ships. The Government had not requested any services from me in connection with the matter and Gen. Goethals stated that it was desirable to get out plans and specifications for the boat corporation as desired by it, and as soon as possible. The work of designing these ships was begun in my office in New York some time in May, and I was paid from time to time my out-of-pocket expenses in connection therewith, but nothing upon account of any fee, and no agreement in regard to fee was made, this matter being discussed with Gen. Goethals and left open for future consideration. Under date of September 14, 1917, Admiral Capps, as general manager of the Fleet Corporation, wrote me to the effect that in order that there should be no interruption in the expeditious completion of these plans for the agency contract pending with the Submarine Boat Corporation I was authorized to "complete the plans in your office for their account, it being understood that you are doing this on the same terms that you have been doing work for the Emergency Fleet Corporation itself." Subsequently a contract was made between the Submarine Boat Corporation and the Emergency Fleet Corporation. The plans for the ships are only now being fully completed. I have not received any fee for my work in connection therewith, but the question of my doing so was discussed with you and you have taken the position that my work in this connection should be considered as covered by the arrangement with the Government.

My relations with the Government under the arrangement made with Gen. Goethals did not involve any services in connection with these ships unless, as contended by

you, they covered the services to the Submarine Boat Co. In September, 1917, I consented to transfer a part of my office force to Washington and continue there, instead of at my New York office, the work for the Emergency Fleet Corporation. A modification of my arrangement with the Government was made in connection with this transfer and is covered by your letter of September 6, 1917, and my acceptance of September 17, 1917. The substance of the modification was that such of my employees as were moved to Washington were put upon the Government payroll. It was stated in your letter that it would not be possible for me to receive compensation for any work done in the matter of the fabricated ship construction, but that where I had existing contracts with owners for the designing and supervising of vessels under construction which had been requisitioned I would be permitted to carry these out, with the understanding that they did not conflict with the affairs of the corporation. It was further stated that my own fee from the Fleet Corporation was to remain as at present and that for any work done in my New York office the cost was to be paid as provided for in Gen. Goethals letter of April 27, 1917; also, that you had no objection to the continuation of my private business in New York and the retention of my present clientele, provided the Fleet Corporation's business had the preference and my private business did not conflict with that of the corporation.

JAHNCKE SHIPBUILDING CORPORATION.

In the latter part of November and in December, 1917, an effort was made to obtain for other contractors building duplicate ships the detail plans and material schedules for the fabricated ships under construction by the Submarine Boat Co. There was considerable delay in accomplishing this, and the engineer of the Jahncke Shipbuilding Corporation, which had a contract with the Fleet Corporation for fabricated ships, because of this delay and because of some modifications in the plans of hull and in the type of machinery, placed an order with my New York office for the preparation of plans for a lump fee of $20,000. I was in Washington at the time, but as soon as I was informed of the matter I instructed my office to withhold action on it pending my return to New York, and on my return to New York I directed that the order be not accepted. On my return to Washington I received a letter from you stating that you had questioned Mr. Jahncke about his relations with me and had elicited from him, under pressure, the statement that he had placed the order for the plans with my New York office; that I had apparently overlooked the stipulation in my arrangement with the Government that I could not accept compensation from any company acting as contractor of the Fleet Corporation; and that you had issued instructions to me to do the work on the same basis as had been arranged in connection with the Fleet Corporation work. Such instructions were received and directed me to bill the out of pocket expenses to the Fleet Corporation for Jahncke's account. The plans are now being gotten out by my New York office. No compensation or fee has been received by me in connection therewith. A statement of my expenses, amounting to several thousand dollars, has been rendered to the Fleet Corporation, but they have not been paid.

CLINCHFIELD NAVIGATION CO.

In February, 1917, I received instructions from the Clinchfield Navigation Co., who are clients of mine, to prepare designs for four wood steamers, and began work on them about that time. Subsequently, under date of March 31, 1917, a contract was signed in regard to my compensation. This provided that I was to receive a fee of $30,800, being 2 per cent of the total price of the vessels. In my testimony before the Senate committee I stated that I did not know the cost of these vessels, which was my recollection, but I find on referring to my fee contract that it was mentioned there that the cost was $385,000, and that they were to be constructed by the Sloan Shipyards Corporation. My agreement with the Clinchfield Navigation Co. also contained a provision for a fee of 1 per cent on the cost of 12 additional steamers on which the Clinchfield Navigation Co. had an option from the Sloan Shipyards Corporation. The designing of these ships had progressed substantially at the time I made my arrangement with Gen. Goethals for work for the Fleet Corporation. I later informed Gen. Goethals of these and other ships under construction, explaining my connection with the Clinchfield Navigation Co., and on May 7, 1917, gave to Mr. Barnett, vice president of the Clinchfield Navigation, a letter of introduction to Gen. Goethals. I did not, however, recommend or urge in any way the acquisition of these ships by the Government, nor interest myself in the matter, and was not consulted in regard thereto. In June the Clinchfield Navigation Co. paid me $11,200 upon account of my agreement with them of March 31, 1917. These are the only payments I have received from them in connection with these ships. My sole interest in the matter is covered by the agreement of March 31, 1917. I did not have anything to do with the ships after the Gov-

ernment took over the contracts, except that, acting for the Government, I modified the designs in order to make them conform to the standard Government ships.

Under date of December 29, 1916, I entered into an agreement with the Clinchfield Navigation Co. to design two steel steamers, the *Clinchfield* and the *Clinchwood*, to be constructed by the Staten Island Shipbuilding Co., my fee being 1½ per cent, amounting to $15,000. These steamers were afterwards sold to the Kerr Co., and by it to the Cunard Co., and on August 3 one of the steamers, when about half completed, was requisitioned by the Shipping Board. I did not have anything to do with the ships after they were requisitioned by the Shipping Board. I have been paid in full by the Clinchfield Navigation Co. my fee of $15,000.

My recollection is that there were two other boats constructed for the Clinchfield Navigation Co. in the Staten Island Shipbuilding Co. yards, and that I had a similar contract for these, but I do not find any record in regard to these two boats and can not state the facts in regard to them at the present time. I have no doubt that the facts are substantially the same as those in connection with the *Clinchfield* and the *Clinchwood*.

MUNSON STEAMSHIP LINE.

During February, 1917, I made three contracts with the Munson Steamship Line to design steamers for them. The instructions had been received and the work started by me months before the contracts were made. These contracts were, one for two steamers to be known as hull *No. 200* and hull *No. 206*, to be constructed by the Newport News Shipbuilding & Dry Dock Co. one for a steel steamer, hull *No. 207*, to be constructed by the same company; and one for a steel steamship to be known as hull *No. 163*, to be constructed by Maryland Steel Co. plant. These agreements provided for payment to me in each case of a lump-sum fee for my services. The fee for hulls *No. 200* and *No. 206* was $8,250; for hull *No. 207*, $5,500; and for hull *No. 163*, $8,500.

All these ships, except hull *No. 200*, which was completed about April, 1917, were requisitioned by the Government on August 3, 1917. I have been paid all but $1,200 of my fee on hulls *No. 200* and *No. 206*, have received $3,300 on account of *No. 207*, which was about 70 per cent completed when requisitioned, and have received the full amount of my fee on *No. 163*, which was nearly completed at the time of requisitioning. I had nothing whatever to do with these ships after they were requisitioned, except that as a matter of professional interest I had my engineer present at the dock trials of *No. 206* and *No. 207* and the trial trip of *No. 163*.

ATLANTIC, GULF & WEST INDIES STEAMSHIP LINES.

I had an agreement with the Atlantic, Gulf & West Indies Steamship Lines for the designing of the steamships *Oriente* and *Orizaba* for the Ward Line service. This agreement was not formulated until April 6, 1917, but the order had been received and the work been in progress since the middle of 1916. The agreement with the Atlantic, Gulf & West Indies Steamship Lines was for a fee of 1 per cent, amounting to $30,000. These ships were requisitioned by the Shipping Board on August 3, 1917, and I have had nothing whatever to do with them ever since. The Ward Line had paid me on account of my fee $14,800.

In December, 1916, the Atlantic Gulf & West Indies Steamship Lines let a contract to the Newport News Shipbuilding & Dry Dock Co. for the construction of two steamers, known as hulls *No. 212* and *No. 213*, which were duplicates of steamers I had previously designed. I had no express understanding with the Atlantic, Gulf & West Indies Steamship Lines as to my compensation, the intention being that I should receive the same fee as on other occasions—I think 1 per cent. At the time contract was let I made some minor alterations in the previous plans and specifications, and have had nothing to do with the matter since. I have received no payments upon account of my fee. I understand that these boats were included in the requisition of August 3.

I beg to hand you herewith copies of the following agreements:

Agreement with Munson Steamship Line for ship *No. 207*.

Agreement with Munson Steamship Line for ship *No. 163*.

Agreement with New York & Cuba Mail Steamship Co. for ships *Oriente* and *Orizaba*.

Agreement with Munson Steamship Line for ships *No. 200* and *No. 206*.

Agreement with Clinchfield Navigation Co. for steamers *Clinchfield* and *Clinchwood*.

Agreement with Clinchfield Navigation Co. for wooden steamers.

Agreement with Clinchfield Navigation Co. for wooden motor ships.

Agreement with Submarine Boat Corporation.

Respectfully, yours,

THEO. E. FERRIS.

SUBMARINE BOAT CORPORATION,
5 Nassau Street, New York City, June 8, 19

THEODORE E. FERRIS, Esq.,
30 Church Street, New York City.

DEAR MR. FERRIS: Confirming my conversation with you one day this wee is our desire that you prepare detail plans and specifications covering the buil of 5,000-ton ocean-going steel freight ships on the following basis:

First. Your out-of-pocket expenses for detail plans and specifications, inclu wages paid to draftsmen, either furnished by us or you (our men being placed your pay roll), to be paid for by us on the basis of their actual wages plus 30 per covering overhead expenses in your office. We will reimburse you weekly or mor for such expenses, payment to be made immediately after receiving your bills.

Second. We desire further to reimburse you on a fee basis for carrying on the a work and the advisory capacity that you will fill with us in carrying out the buil of ships of this size if we are awarded a contract by the United States Shipping B Emergency Fleet Corporation, the amount of said fee to be adjusted between

The importance of having the finished plans and specifications in the shortest sible time we realize you fully appreciate, and trust there will be nothing to pre your giving us what we will require to begin work next week in laying down ships on our mold loft and preparing a bill of materials.

Trusting that nothing will prevent your office from giving your best attenti our requirements, we remain,

Yours, very truly,

H. R. SUTPHEN, *Vice Preside*

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION,
Washington, D. C., September 14, 19

Mr. THEO. E. FERRIS,
Munsey Building, Washington, D. C.

DEAR SIR: In order that there shall be no interruption in the expeditious cor tion of the plans for the agency contract pending with the Submarine Boat Cor tion, you are authorized to complete plans for the 5,000-ton ships in your office for their account, it being understood that you are doing this on the same terms you have been doing work for the Emergency Fleet Corporation itself.

Very truly, yours,

W. L. CAPPS, *General Manag*

NEW YORK & CUBA MAIL STEAMSHIP CO., WARD LINE,
New York, April 23, 19

Steamships *Oriente* and *Orizaba.*

Mr. T. E. FERRIS,
30 Church Street, New York City.

DEAR MR. FERRIS: Referring to your letter of April 6, I beg to confirm your u standing of our arrangement as outlined therein, concerning your services as architect and engineer with regard to the construction of the two vessels know Cramp's yard hulls *No. 434* and *No. 435.*

I have requested that a voucher be prepared so that check may be mailed to at once for the first three payments due—that is, September and December, and March, 1917.

Very truly,

ALFRED GILBERT SMITH, *Preside*

THEODORE E. FERRIS,
30 Church Street, New York City, April 6, 19

S. S. *Oriente* and *Orizaba.*

Mr. ALFRED GILBERT SMITH,
President New York & Cuba Mail Steamship Co.,
Pier 13, East River, New York City.

DEAR SIR: Referring to our understanding in connection with my services as naval architect and engineer and your representative, to be rendered in the matt conferring and consulting with you, investigating and approving design, elem

general and detail plans, both hull and machinery and otherwise, contract verification, amending and approval of detail specifications, handling correspondence and supervising the construction of the above ships for your company contracted for with the William Cramp & Sons' Ship & Engine Building Co., known as their hulls *No. 434* and *No. 435*, I am to receive from your company for services rendered as above mentioned a compensation of 1 per cent of the gross cost of these ships, exclusive of insurance and interest, traveling expenses to be paid additional to the 1 per cent mentioned. The amount of the 1 per cent of the gross cost to be paid in installemnts as follows:

September 1, 1916, $3,700; December 1, 1916, $3,700; March 1, 1917, $3,700; June 1, 1917, $3,700; September 1, 1917, $3,700; December 1, 1917, $3,700.

The difference between the above payments and 1 per cent of the gross cost, exclusive of insurance and interest, payable upon completion of the second ship.

It is my understanding that you will render me assistance in connection with the supervision and inspection of these ships by having a resident inspector located at the yard, or make other arrangements for resident inspector that may be agreed upon, at your expense, said inspector to be under my direction and to report to me and likewise to the steamship company, I and my assistants to make visits to the yard for the purpose of conferring with builders regarding design, detail plans, and all work in this connection, and in addition inspect the workmanship and material during progress of construction of the ships as may be necessary from time to time until completion of the vessels.

I will thank you for a written acceptance of this understanding at your early convenience. However, in the absence of written acceptance from you will understand the foregoing meets with your approval and will serve as a confirmation of our verbal understanding in connection with this matter.

Respectfully, yours,

——— ———.

CLINCHFIELD NAVIGATION CO. (INC.),
24 Broad Street, New York City, April 20, 1917.

MR. THEODORE E. FERRIS,
30 Church Street, New York City.

DEAR MR. FERRIS. Your letter of April 16, in regard to additional compensation to be paid you in connection with the building of four wooden motor ships. I consider your suggested charge of $4,800 for the preparing of additional plans and drawings, not contemplated when we made the original agreement with you, as a fair and reasonable one, and I am very glad to confirm this agreement and will make payment to you at any time on the rendering of a bill.

Very truly, yours,

C. E. BOCKUS, *President.*

CLINCHFIELD NAVIGATION CO. (INC.),
24 Broad Street, New York, April 7, 1917.

MR. THEODORE E. FERRIS,
30 Church Street, New York City.

DEAR MR. FERRIS: For the supervision of the construction of the four motor ships to be built for our company by the Sloan Shipyards Corporation, you are to be paid $24,800, in eight installments of $3,100 each, two of which have already been paid. The third will be due May 1, 1917; the fourth, June 1, 1917; the fifth, July 1, 1917; the sixth, September 1, 1917; the seventh, November 1, 1917; and the final payment for the completion of the fourth ship. It is also agreed, in case of making any material changes in these ships which may entail additional work in the way of additional supervision in preparing changes in plans, specifications, etc., or if the ships are materially delayed in completion, additional compensation is to be given you, which is to be agreed upon between us.

It is further our understanding that as you have been obliged to prepare more plans than was originally thought to be necessary, and as the preparing of such plans is for the protection of our interests, we are to pay you such reasonable sum in addition for this additional service as we mutually agree upon.

Very truly, yours,

CHARLES E. BOCKUS, *President.*

CLINCHFIELD NAVIGATION CO.,
New York City, March 31, 1917.

Mr. T. E. FERRIS,
New York City.

DEAR MR. FERRIS: Referring to the services to be rendered by you to this company as naval architect and engineer, also as our representative in the planning and building of four wooden steamers, in accordance with contracts dated March 31 between the Sloan Shipyards Corporation and this company, ships *Nos. 5, 6, 7,* and *8,* each vessel to cost $385,000, or a total of $1,540,000.

This will confirm our understanding that you will, for a compensation of 2 per cent of the total price of the four vessels, or a fee of $30,000, render services to this company in preparing model and lines for these ships, together with arrangement plans, also layout of propelling machinery, approve and pass upon all plans submitted by the builders, consult and advise with us, handle correspondence and other negotiations with the builders, acting as our representative, and further superintend the building of the ships and machinery, maintaining at your expense a resident inspector on the work.

The above fee is to be paid to you in installments similar to our arrangement covering your fee on the wooden motorships which are building at the same yard.

It is understood that the four steamers referred to herein are to be duplicates, and that the hulls will be built and machinery installed at the same yard on Puget Sound in close proximity to Seattle.

It is further understood that we have an option from the Sloan Shipyards Corporation for 12 additional steamers, and that in the event of our closing a contract for these additional vessels, you will perform similar services in regard to such steamers; but your compensation on these additional steamers will be reduced to 1 per cent of their total cost.

We will thank you for a written acceptance of the above understanding.

Yours, very truly,

CHARLES E. BOCKUS,
President.

NEW YORK CITY, *April 3, 1917.*

Mr. C. E. BOCKUS,
President Clinchfield Navigation Co.,
New York.

DEAR MR. BOCKUS: This will serve as an acknowledgement of your letter of March 31, in reference to my compensation for the planning and building of wooden steamers and the rendering to your company of services as your naval architect and marine engineer.

The terms stated in your letter of March 31 as to the four wooden ships are satisfactory and are accepted.

In reference to the option on 12 additional duplicate steamers which you have in hand from the Sloan Shipyards Corporation, and in the event of your closing contract for these additional vessels, I note your wish that I perform similar services in the planning and building and acting as your naval architect and marine engineer, for which you set my compensation at 1 per cent of the total cost. While this is less than my usual compensation, I will meet your wish and accept 1 per cent of the total cost, in view of the duplication of design in all 12 steamers. This rate of compensation, therefore, on the 12 additional duplicate steamers is satisfactory and accepted.

It is understood that the payments of my fee as above will be made in the same number of installments as my compensation on the four wooden motor ships which you are building at the same yard, ranging over the period of construction of the steamers.

Respectfully, yours,

THEODORE E. FERRIS.

FEBRUARY 13, 1917.

CLINCHFIELD NAVIGATION CO.,
New York City.

GENTLEMEN: Referring to services to be rendered by me to you company as naval architect and engineer: also as your representative in the planning and building of four wooden motor ships, in accordance with contracts under date of December, 1916, between the Seattle Dry Dock Co. and the Clinchfield Navigation Co. (Inc.), ships *No. 1* and *No. 2* to be delivered September 20, 1917, and ships *No. 3* and *No. 4* to be delivered December 4, 1917, each vessel to cost $310,000, or a total for the four of $1,240,000.

nfirming our understanding for a compensation of 2 per cent of the total price he four vessels, or a fee of $24,000. I am to render services to your company in paring model and lines for these ships together with arrangement plans, also nt of propelling machinery, approve and pass upon all plans submitted by the lders, as far as conditions will permit, consult and advise with you, handle cor- ondence and other negotiations with the builders, acting as your representative further superintend the building of the ships and machinery, understanding when the real construction of the vessel has progressed sufficiently I will at my ense maintain a resident inspector on the work.

he above fee to be paid me in installments as follows

1, 1917	$3,000
1, 1917	3,000
1, 1917	3,000
1, 1917	3,000
1, 1917	3,000
1, 1917	3,000
1, 1917	3,000
n completion of fourth ship	3,000
Total	24,000

the event of making material changes in the ships, entailing additional work in matter of additional supervision or preparing additional plans, specifications, etc., further in the event the ships are materially delayed in completion, I am to ive additional compensation on a basis to be mutually agreed upon. This is vided for because of possible extended inspection services, expenses of same and itional work in preparing new or modified plans.

is understood that the four ships referred to herein are duplicates and all the ls will be built and machinery installed as the same part.

will thank you for a written acceptance of the above understanding.

Respectfully, yours.

February 4, 1917.

Charles E. Bockus,
President Chadfield Navigation Co., Inc., New York City.

ear Mr. Bockus: This will serve as an acknowledgment of yours of the 4th nst., referring to Mr. Stewart's letter to me of January 31, confirming our understanding with reference to our arrangement for the four wooden motor ships to be lt by Mr. Sloan, of Seattle. Your letter is provided for in my agreement with Mr. L. V. ber, under which agreement I was to receive 2 per cent of the purchase price for h of the vessels to be constructed in case four motor ships were contracted, in only two were contracted, the payment was to be 2½ per cent of the purchase e. The payments to be made in seven installments, same being under the memo- dum agreement entered into in November, 1914, between myself and Mr. L. V. ber.

take it from your letter that you are under the impression that the agreement ered to between myself and Mr. L. V. Barber was cancelled, or rather signed. rever, the situation is that I signed a contract or memo the agreement, retaining originals to Mr. Barber, but I am not in possession of a signed copy of same, is g held up for a long time. It would therefore seem well that I receive a signed y of this agreement, or sign another similar agreement between your company and self; or if you would prefer, as we usually do, I will write up a proper agreement, ing h the total amount and the amount of installments referred to, and you could nowledge receipt of same and make a complete record of the matter.

Respectfully yours.

[illegible]
[illegible] February 4, 1917.

Theodore E. Ferris, Esq.

ear Mr. Ferris: Your letter of January 31 and I have received a copy of your of nary 31.

r. Stewart is entirely right in saying that the [illegible] I make exactly similar arrangements with you in regard to the two wooden motor s to be built by Mr. Sloan of Seattle. Your letter is as provided for in your agreement

with Mr. A. W. Archer. This agreement was that you were to be paid 2 per cent of the purchase price for each of the vessels to be constructed in case four motor ships were constructed, in case only two were constructed, the payment was to be 2½ per cent of the contract price. The payments to be made in seven instalments—this being under the memorandum agreement entered into in November, 1916, between yourself and Mr. A. W. Archer.

Very truly, yours,

CHARLES E. BOCKUS, *President.*

MUNSON STEAMSHIP LINE,
New York City, February 25, 1916

Mr. THEODORE E. FERRIS,
Naval Architect and Marine Engineer, New York.

DEAR SIR: This will acknowledge receipt of your letter of February 23.

We now take pleasure in confirming the understanding outlined in that letter respecting your services as naval architect and engineer in examining the plans and specifications prepared by the Newport News Shipbuilding & Dry Dock Co. and supervising the construction of our two freight ships now being constructed by them, known as their yard *Nos. 200* and *206*. Your compensation for such services to be as stated and payments to be made as outlined.

Very truly, yours,

F. C. MUNSON, *President.*

FEBRUARY 23, 1916.

Mr. FRANK C. MUNSON,
Vice President Munson Steamship Line,
New York City.

DEAR SIR: Referring to our understanding in connection with my services as your naval architect and engineer to be rendered in the matter of examining plans and specifications prepared by the builders and supervising the construction of two freight ships for your company contracted for with the Newport News Shipbuilding & Dry Dock Co., known as their *Nos. 200* and *206*. I am to receive from your company for service rendered as above mentioned a compensation for ship *No. 200* of $4,500 and for ship *No. 206*, a duplication, $3,750, making a total compensation of $8,250, plus traveling expenses, payable when billed, said traveling expenses to and from Newport News to be charged proportionately against ship *No. 200* and ship *No. 206*, and other vessels that may be under construction at this yard under my supervision. The amount of $8,250 to be paid in installments as follows:

Upon examination, revision, and conclusion of design, plans, and specifications for both ships	$1,050
July 1, 1916	1,200
Oct. 1, 1916	1,200
Jan. 1, 1917	1,200
Apr. 1, 1917	1,200
July 1, 1917	1,200
Upon completion of the second ship, No. 206	1,200
Total	8,250

It is my understanding that you will render me assistance in connection with the supervision and construction of these ships by having a resident inspector located at the yard or other arrangements for resident inspector that may be agreed upon and at your expense, said inspector to be under my direction and to report to me and likewise to the steamship company. I to make visits to the yard for the purpose of conferring with the builders regarding the design of ships, detail plans and all work in this connection, and in addition inspect the workmanship and material during the progress of construction of the ships as may be necessary from time to time until the completion of the vessels.

I will thank you for a written acceptance of this understanding, noting that I have made no reference to additional expense and extra work on the part of myself and staff in connection with certain changes in these ships covering work concerning bronze propeller wheels, oil-burning system, and matters of this kind not originally contemplated.

Respectfully, yours,

———.

NEW YORK CITY, *February 7, 1917.*

Mr. F. C. MUNSON,
President Munson Steamship Line,
New York City.

DEAR SIR: Referring to our understanding in connection with my services as your naval architect and engineer to be rendered in the matter of superintending the construction of the above ship for your company contracted for with the Newport News Shipbuilding & Dry Dock Co., known as their hull *No. 207*, which is a duplicate of their hulls *Nos. 200*, and *206;* I am to receive from your company for services rendered as above mentioned a compensation of $5,500, plus traveling expenses, payable when billed; said traveling expenses to and from Newport News to be charged proportionally against hulls *Nos. 200*, *206*, and *207* and other vessels that may be under construction at that yard under my supervision. The amount of $5,500 to be paid in installments as follows:

Feb. 1, 1917	$1,100
Aug. 1, 1917	1,100
Oct. 1, 1917	1,100
Feb. 1, 1918	1,100
Balance upon completion	1,100
Total	5,500

It is my understanding that you will render me assistance in connection with the supervision and inspection of this ship by having a resident inspector located at the yard or make other arrangements for resident inspector that may be agreed upon, at your expense. Said inspector to be under my direction and to report to me and likewise to the steamship company, I to make visits to the yard for the purpose of conferring with builders regarding design of the ship, detail plans and all work in this connection and in addition inspect the workmanship and material during progress of construction of the ship as may be necessary from time to time until completion of the vessel.

It is my further understanding in making changes in this ship, *No. 207*, and likewise in *No. 206* as now arranged for, viz, in the model of the ship effecting a revision of structural plans, etc., I am to receive additional compensation.

I will thank you for a written acceptance of this understanding at your early convenience.

Respectfully, yours,

THEODORE E. FERRIS.

NEW YORK CITY, *February 19, 1917.*

Mr. F. C. MUNSON,
President Munson Steamship Line,
New York City.

DEAR SIR: This will serve as an acknowledgment of yours of the 15th instant in reference to the above, confirming our understanding as to my compensation as outlined in my letter of the 7th instant except that you prefer to make a change in the second, third and fourth payments because you are now advised that delivery of this ship will be postponed on account of Government intervention; that you will make the second payment August 1, third payment October 1 and the fourth payment February 1, 1918, and the balance upon completion.

This is quite satisfactory, in view of the completion date of this ship having been extended. However, as you state, if there should be any changes in the present advices of the shipbuilding company which will permit of an earlier delivery you will change these payment dates, i. e., advance them. Further, in the event of something occurring that would make the completion of this ship indefinite there should be a satisfactory and mutual adjustment as to final payment.

Respectfully, yours,

THEODORE E. FERRIS.

MUNSON STEAMSHIP LINE,
New York City, February 15, 1917.

Mr. T. E. FERRIS,
New York City.

DEAR SIR: This will acknowledge receipt of your favor of February 7.

Newport News Shipbuilding Co., hull *No. 207:* This will confirm the understanding as to compensation outlined in your letter above referred to, but it is also our understanding that you are to make the usual number of trips to Newport News to inspect the building of this vessel as a part of the regular work which you have done for us on each steamer building.

We would prefer, however, to make a change in the second, third, and fourth payments, as we are now advised that the delivery will be postponed on account of Government intervention. We will make the second payment to you on August 1, the third on October 1, the fourth on February 1, 1918, and the balance on completion. If there should be any changes from the present advices of the shipbuilding company to us which will permit of an earlier delivery, we will of course change these payment dates—that is, advance them—but so far as we understand to-day there will be no such change.

Very truly, yours,

F. C. MUNSON, *President.*

NEW YORK CITY, *February 19, 1917.*

Mr. FRANK C. MUNSON,
President Munson Steamship Line,
New York, City.

Bethlehem Steel Co. hull *No. 163*, our *Walter D. Munson.*

DEAR SIR: This will serve as an acknowledgement of yours of the 15th instant, confirming understanding for my services in reference to the above, for which I beg to thank you.

Regarding the exceptions you make that in case the delivery of this ship is further delayed than now expected, the dates of payments will be subject to change by you to more or less conform to the delay, would state this is of course quite satisfactory, unless something should occur to make the completion of the ship indefinite, in which event we should mutually adjust the matter of payments.

Respectfully, yours,

THEODORE E. FERRIS.

MUNSON STEAMSHIP LINE,
New York City, February 15, 1917.

Mr. THEODORE E. FERRIS,
New York City.

Bethlehem Steel Co. Hull No. 163, our *Walter D. Munson.*

DEAR SIR: Your letter of February 7 has been duly received.

This will confirm the understanding as reached between us and as outlined in your letter of the 7th, with the additional understanding that you are to give the regular inspection service to material and workmanship by frequent trips to Sparrows Point. In other respects we confirm the understanding as outlined, except that in case the delivery of this boat is further delayed than now expected the dates of payment will be subject to change by us to more or less conform with the delay.

Very truly, yours,

F. C. MUNSON, *President.*

NEW YORK CITY, *February 7, 1917.*

Mr. F. C. MUNSON,
President Munson Steamship Line, New York City.

DEAR SIR: Referring to our understanding in connection with my services as your naval architect and engineer to be rendered in the matter of designing, preparing arrangement plans, model, lines, detail specifications, approval of plans submitted by the builders, consultation with you, correspondence, and acting as your representative; further supervising the construction of one freight ship for your company, contracted for with the Behtlehem Steel Co., Maryland Shipbuilding Plant, Sparrows Point, Md., known as their *No. 163;* I am to receive from your company for services rendered as above mentioned a compensation of $8,500 plus traveling expenses, payable when billed, said traveling expenses to and from Sparrows Point charged proportionately against ship *No. 163* and other vessels that may be

under construction at that yard under my supervision. The amount of $8,500 to be paid in installments, as follows:

Feb. 1, 1917	$2,000
Mar. 15, 1917	1,300
May 1, 1917	1,300
July 1, 1917	1,300
Aug. 15, 1917	1,300
Upon completion	1,300
	8,500

It is my understanding that you will render me assistance in connection with the supervision and inspection of this ship by having a resident inspector located at the yard or make other arrangements for resident inspector that may be agreed upon, at your expense. Said inspector to be under my direction and to report to me and likewise to the steamship company. I to make visits to the yard for the purpose of conferring with builders regarding design of the ship, detail plans and all work in this connection and in addition inspect the workmanship and material during progress of construction of the ship as may be necessary from time to time until completion of the vessel.

It is my further understanding that in the event of making material changes in this ship I am to receive additional compensation, it being agreed that for the work already done in preparing plans for passenger accommodations I am to receive an additional compensation of $500. Further, in the event of duplicating this ship from designs prepared by me, I will receive consideration of compensation as is usual custom.

I will thank you for a written acceptance of this understanding at your early convenience.

Respectfully, yours, THEODORE E. FERRIS.

STEAMSHIPS "CLINCHFIELD" AND "CLINCHWOOD."

CLINCHFIELD NAVIGATION CO. (INC.),
24 Broad Street, New York, January 4, 1917.

Mr. THEODORE E. FERRIS,
50 Church Street, New York City.

DEAR SIR: We acknowledge your letter of December 39, relative to your compensation for services in connection with the construction of the above vessels.

We hereby confirm the installments and dates of payment of same as outlined by you, and inclose herewith our check for $2,500 to cover first payment.

Very truly, yours,

J. L. STEWART, *Treasurer*

DECEMBER 29, 1916.

Mr. C. E. BOCKUS,
President Clinchfield Navigation Co. (Inc.), New York City.

DEAR MR. BOCKUS: This will serve as an acknowledgment of yours of the 22d instant, confirming our conversation in which it was agreed that I am to furnish designs and specifications for, and superintend the construction of, two ships, duplicates of the *Clinch Brook* and *Clinch River* now building for your company by the Staten Island Shipbuilding Co., to be known as *Clinchfield* and *Clinchwood*.

I am to receive a compensation from your company for the above services of 1½ per cent of the contract price, or a total for the two ships of $15,000, which is satisfactory to me and agreed to.

I would suggest, agreeable to you, that the above amount be paid in installments as follows:

Dec. 26, 1916	$2,500.00
Feb. 15, 1917	2,500.00
May 15, 1917	2,500.00
Aug. 15, 1917	2,500.00
Nov. 15, 1917	2,500.00
Upon completion of second ship	2,500.00
	15,000.00

If the above installments and dates for payment of same are satisfactory, would thank you for confirmation of same.

Respectfully, yours,

CLINCHFIELD NAVIGATION CO. (INC.),
24 Broad Street New York, December 22, 1916.

Mr. THEODORE E. FERRIS, *Naval Architect,*
30 Church Street, New York, N. Y.

DEAR MR. FERRIS: This will confirm our conversation in which it was agreed that you were to furnish the designs and specifications and to oversee the construction of the two ships building for us at the Staten Island Shipbuilding Co., to be called the *Clinchfield* and *Clinchwood*, for 1½ per cent of the contract price, or $15,000.

You will excuse my delay in writing this, but I feel sure you thought as long as we had the conversation that the settlement was made on this basis, which I hope is a satisfactory one to you.

With best wishes for a merry Christmas and a prosperous new year, I remain,

Very truly, yours,

C. E. BOCKUS,
President.

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, January 23, 1918.

Mr. THEODORE E. FERRIS,
No. 30 Church Street, New York City.

DEAR SIR: Your letter of January 21 has received the careful consideration of the legal division and has been submitted to the vice president and general manager, and I am authorized to inform you that your resignation is requested, to take effect immediately.

Very truly, yours,

———,
Manager Division of Steel Ship Construction.

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, January 23, 1918.

Memorandum for vice president and general manager.

After reading Mr. Ferris's testimony before the Senate Committee on Commerce, I telephoned the Clinchfield Navigation Co., asking them if they were expecting to pay Mr. Ferris any commission or compensation on the 16 vessels building with the Sloan Shipyards Corporation. They said they were. I thereupon asked them to send me their agreement with Mr. Ferris, which accounts for the presence of the correspondence submitted by the president of the Clinchfield Navigation Co.

Upon receipt of Mr. Ferris's letter of January 21, in response to my verbal request of the 17th instant, I submitted all of the correspondence above noted, and the correspondence in the Jahncke matter to the legal division for comment. That comment is herewith submitted.

The facts disclosed do not justify me in placing full confidence in Mr. Ferris for the fulfillment of the very responsible position which he holds, and therefore I recommend that there should be sent to him to-day the inclosed letter.

Very truly, yours,

F. T. BOWLES,
Manager Division of Steel Ship Construction.

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, January 23, 1918.

Memorandum for Admiral F. T. Bowles.

I have examined the testimony of Mr. Ferris before the Senate Committee on Commerce and have gone over the correspondence submitted to us by the Clinchfield Navigation Co. and by Mr. Ferris, also the correspondence in our own files in connection with the Jahncke Shipbuilding Co. My conclusions are as follows:

(1) In recommending the Clinchfield Navigation Co. to Gen. Goethals, Mr. Ferris did not disclose with the frankness and definiteness that might be desired, the fact

t the Clinchfield Navigation Co. had a contract for 4 vessels and option on 12 sels, which 16 vessels were subsequently contracted for between the Emergency et Corporation and the Sloan Shipyards Corporation.

ubsequently and perhaps as a result of this, the Emergency Fleet Corporation, ead of directly negotiating with the Clinchfield Navigation Co. for the sale of its tracts to the Fleet Corporation, entered into a contract with the Sloan Corporation er which it agreed to pay the Sloan Corporation $490,000 per vessel, whereas Sloan Corporation was building them for the Clinchfield Navigation Co. for 5,000 per vessel.

r. Ferris knew, as he concedes, that the Clinchfield Navigation Co. was to have e vessels for $385,000 each. He must have known subsequently that the Fleet poration agreed to pay Sloan for these vessels $490,000, and it does not appear that in any way protested or sought to serve the interests of the Fleet Corporation in matter.

2) Mr. Ferris was not frank as to the compensation to be paid him by the Clinch- l Navigation Co. for the 4 steamers which the Sloan Corporation had contracted build for the Clinchfield Navigation Co., or the 12 steamers that the Clinchfield had under option with the Sloan Corporation.

n introducing the Clinchfield Navigation Co. to Gen. Goethals he stated, "I have interest in the ships" (the 4 steamers and the 4 motor ships—the motor ships were er taken over by the Fleet Corporation) "except to represent my clients in the nning and the building of the vessels. This same yard claims to be in position undertake 12 more ships, steam propelled * * *." This letter does not dis- se that Ferris was to be paid anything by the Clinchfield Navigation Co. if the 4 amers were taken over by the Fleet Corporation, nor does it disclose that Ferris l any arrangement with respect to the 12 steamers then under option to the Clinch- ld Navigation Co., though as a matter of fact Ferris had an agreement for compen- ion.

Mr. Ferris's agreement for compensation with respect to the 4 steamers and the 12 der option would have brought him over $70,000. Nothing that has been submitted Mr. Ferris discloses that he intended to relinquish this compensation from the inchfield Navigation Co., except that in conversation with Admiral Bowles he s ted. But there are no papers evidencing any such intention, and the letter written us, dated January 21, 1918, summarizing the situation and prepared with a great al of care, does not so state, but it does show that he received $11,[illegible] on account urther, the Clinchfield Navigation Co. states that they expected to make Mr. Ferris rther payments.

3) On September 6, 1917, Admiral Bowles notified Mr. Ferris that it would not be sible for him "to receive compensation from any work done in this matter [illegible] ted ship construction from any company with [illegible] the Emergency Fleet Corporation." Nevertheless, Mr. Ferris in New York [illegible] prepare plans for the Jahncke Shipbuilding [illegible] and to accept in payment therefor $50,000. These plans actually resulted in a ving in cost to the Jahncke Shipbuilding [illegible] tended. Mr. Ferris claims in his letter of January [illegible] that he [illegible] fice to withhold action on the preparation as soon as he learned of the passing of the der for the plans and that upon his return to New York he [illegible] e not accepted.

In view of the order of Admiral Bowles in his letter of September [illegible] and of he relationship of Mr. Ferris to the Emergency Fleet Corporation there was [illegible] be no reason why Mr. Ferris should have delayed reporting the [illegible] the plans but the facts and circumstances presented [illegible] that the der was taken with Mr. Ferris's consent.

4. The letter presented by Mr. Ferris in explanation of [illegible] fully drawn is vague and [illegible] promising position in which he has been [illegible]

Very truly yours,

[illegible]

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, January 19, 1918.

Memorandum in the matter of the Jahncke plans.

About a week after the receipt of Mr. Jahncke's letter of November 30, 1917, in which he states that he does not want the plans for the submarine boat, but has engaged a naval architect to make his own plans, Mr. Jahncke came to my office on business and after it was concluded I asked him who it was.

With reluctance he told me it was Mr. Ferris, and when I asked him how much he was paying Mr. Ferris he first told me $12,000, and finally told me $20,000. I informed Mr. Jahncke that this was an impossible situation, and after consultation with my assistant, Mr. D. H. Cox, and with Admiral Harris, then the general manager of the Fleet Corporation, I directed Mr. Ferris to prepare the plans for Mr. Jahncke at the expense of the corporation under the terms of his agreement with Gen. Goethals, and that the corporation would be reimbursed for the cost of the plans so prepared for Mr. Jahncke by deduction from the payments due him on his contract. I then requested Mr. Ferris to inform me whether or not the ship he was designing for Mr. Jahncke was a cheaper ship than he had agreed to build under his contract. Mr. Ferris's own statement of the reduced cost is contained in his memorandum dated December 14, 1917. The deduction he makes therein for increase in dead-weight tonnage has nothing to do with the cost; in my judgment the decreased cost of the vessels amounts to over $100,000.

I then informed Mr. Ferris in writing in my memorandum dated December 5, 1917, which was personal, that his action in this matter was in violation of the terms of my letter of September 6, copy of which is included in the correspondence, in which I had informed him that he could not do any work for contractors with the Fleet Corporation in his private capacity. He responded that he had mislaid my letter and asked for another copy, which was sent to him. He made a full explanation of the matter in a letter addressed to Admiral Harris, copy of which is in the correspondence.

Mr. Jahncke denied vigorously that he intended to save money by his arrangement with Ferris and only that he intended to save time. The facts of the matter do not permit me to place confidence in this statement, although it may have been true so far as concerns Jahncke himself.

Upon delivery of the first plan prepared by Mr. Ferris to Mr. Jahncke, I informed him that the reduced cost of the vessels would be a matter of adjustment in the regular official manner.

Very truly, yours.

F. T. BOWLES,
Manager Division of Steel Ship Construction.

JANUARY 4, 1918.

Memorandum for auditing division, designing charge, Jahncke Shipbuilding Co., Contract No. 29.

An arrangement has been made whereby the Fleet Corporation prepares for the contractors the detail plans and material schedules of the vessels under the above contract, the expense of this work to be charged against the contractors.

A voucher has to-day been passed, dated December 31, covering a charge of this character of $2,737.78.

This matter is called to your attention in order that the necessary procedure may be established.

F. T. BOWLES,
Manager Division of Steel Construction.

NEW ORLEANS, *December 18, 1917.*

Admiral F. T. BOWLES,
Chief of Construction, Emergency Fleet Corporation,
Washington, D. C.

DEAR SIR: In re contract 93 S. C.—New design for 5,000-ton dead-weight capacity steamers:

In accordance with our conversation last evening in your office, I beg leave to submit for your attention the following sworn statement:

Pursuant to your letters October 30, 1917, to the Jahncke Shipbuilding Corporation and to the Submarine Boat Corporation, and in furtherance of preliminary arrangements for plans between Mr. Ernest Lee Jahncke and Mr. Sutphen, I presented myself

on November 14 at [illegible] at Mr. Suttber's office, 11 Pine Street, New York City and explained my mission. Mr. Suttber declined to give or sell us the plans prepared by his company, giving as his reason for so doing that the plans were incomplete, incorrect and might lead us into serious errors.

I offered to relieve Mr. Suttber's company of all responsibility for the use of the plans but this it seemed was not sufficient for him. Relations were temporarily broken off and I returned to Washington, where after explanation of above, I wrote, on November 14, to the Submarine Boat Corporation a letter, copy of which was handed to one of your Mr. Daniel H. Cox, which said letter was, to my understanding, a formal order to the Submarine Co. to deliver the plans to us and relieving them of all responsibility.

After giving some of your letter to be reserved, read and digested, I presented myself again on November 21 at noon at the Submarine Co.'s office in New York and had an interview with Mr. Suttber, who, after weighing the letter, Mr. Suttber, however, still declined to make any arrangements, for the same or the reason mentioned in the first interview and for the additional reason that he had seen Admiral Capps in New York, had explained the case and that the Admiral had agreed with him.

Mr. Suttber further added that he did not think the Government had a legal right to make him give the plans, and that he was going to turn the case over to their attorney.

The mention of Admiral Capps's name in this matter made it impossible for an ex-officer to exercise further my right to the plans, and I must go on record with my views in this matter.

On leaving Mr. Suttber's office I wired results of the interview at once to Mr. Jahncke in New Orleans, asking for immediate instructions, as the job was urgent, having lost over 10 days of our precious time. I received no answer giving me the power to use my own judgment, and I, whatever was necessary.

I went at once to No. [illegible] Ninth Street, Mr. Ferris's office, and met Mr. [illegible] Dornin in charge of said office. I explained my case and asked if there was a possibility of obtaining a new design in a very short time. Mr. Dornin said he was sure he could make a new design of a ship as good if not better than the Submarine Boat, [illegible] about 10 weeks for main plans and 3 weeks more for all complete working plans and details, etc.

We went over the probable cost based on a large [illegible] and I was working practically day and night, and I told the [illegible] I told Mr. Dornin that I would [illegible] and [illegible] see Mr. Ferris and ascertain how soon he would be willing to incorporate the [illegible] and secret, to see if he would be really interested [illegible] phoned to Mr. Ferris at Washington and was advised that Mr. Ferris could not take the work. I then asked Mr. Dornin to go to Washington and present the case in detail to Mr. Ferris and to report back in a more complete report.

Mr. Dornin and I came to Washington on the [illegible] going at once to see Mr. Ferris. [illegible] and reported again a refusal. [illegible] called again on Mr. Ferris who [illegible] Dornin so reported to me at the New [illegible] drawn at once as per our [illegible] to our fabricators, [illegible] to Mr. Ferris's office in New York to see that [illegible] shop practice.

This was the end of our transaction [illegible] transactions I [illegible] on November [illegible] and 93 S. C.

On November 14 [illegible] H. Cox, who took me to the office and met the [illegible] second refusal. [illegible] Admiral Capps's name. Mr. [illegible] be Mr. Cox would see Admiral [illegible] I was instructed to report at [illegible]

I so reported and waited [illegible] seen Admiral Capps. The Admiral [illegible] with Mr. Suttber, and I [illegible]

Mr. Cox said he would try again to get the plans and [illegible] Orleans, for which city I was [illegible] I wired Mr. Ferris's office to get the plans [illegible]

I refer you now to telegrams and letters exchanged between your office and ours on November 27, 28, and 30, for further details of what happened on my return to New Orleans.

I am inclosing for your perusal a copy of the formal agreement of contract between Mr. Ferris and ourselves. This agreement was prepared by me, signed in duplicate by our president, and the two copies went to New York for Mr. Ferris's signature. To this date the contract remains unsigned by Mr. Ferris, and the two copies sent him are still in his hands.

On last Thursday I received a wire from Mr. Jahncke, then in Washington, instructing me to leave New Orleans as soon as possible and report to you to give any explanation you might deem necessary. Within 10 minutes of my arrival in Washington I reported to you.

I have just been handed, by Mr. Jahncke, a blue print of the midship section of new ship, but have had no time as yet to look at it. This, Admiral, is a complete and correct history of the new plans for our ships.

In conclusion, I beg to state that if I have erred in judgment only my anxiety to carry out a formal contract with our Government in strict accordance with the terms thereof is to be blamed.

I could also mention my patriotism as an American citizen, and the fact that my mother country, France, is devasted by the enemy, that my brother soldiers need help in man power and food, and that my two young nephews, the only males left in the family, after me, have been killed at the front.

The above statement is sworn to upon my honor as an American citizen, and as an ex-French officer, and will be formally sworn to before a notary public if you will be so kind as to ask Mr. Oller to act in his official capacity.

L. H. GUERIN,
Chief Engineer Jahncke Shipbuilding Co.

P. S.—May I ask that you return to me the two inclosed documents after making copies of same if you so desire. Also, would it be possible and proper for you to give copy of above statement to Mr. Ferris, Mr. Sutphen, and Mr. Dornin.

WASHINGTON, D. C., *November 23, 1917.*

Memorandum of agreement entered into at Washington, D. C., November 23, 1917, by and between the Jahncke Shipbuilding Corporation, herein represented by Mr. L. H. Guerin, its duly authorized chief engineer, and Mr. Theodore E. Ferris, naval architect, herein represented by T. B. Dornin, his authorized representative, as follows:

Mr. Theodore E. Ferris agrees and binds himself to furnish, complete, to the Jahncke Shipbuilding Corporation all general detailed plans, including all shop details, for the fabrication and erection of the steel framing and plating covering the complete construction of 5,000-ton D. W. capacity single-screw cargo steamers in accordance with the specifications and the contract between the United States Shipping Board, Emergency Fleet Corporation, and the Jahncke Shipbuilding Corporation. The plans furnished shall include all the machinery arrangements, piping plans, drainage, etc., to make the work complete in every respect.

It is agreed that Mr. Ferris shall procure, for every sheet of plans, the approval of the Fleet Corporation, together with that of Lloyds and the American Bureau of Shipping.

It is further agreed that the Jahncke Shipbuilding Co. shall receive the work in the following order and at the following times:

Bills of material: Midship section, December 5, 1917; stern framing, December 15, 1917; bow framing, December 25, 1917. Shop details: Midship section, December 27, 1917; stern framing, January 20, 1918; bow framing, February 10, 1918.

All other necessary details to follow thereafter in as short a time as is possible.

The above dates are those on which the said plans shall be presented to the classification societies for their approval.

The plans shall, as much as possible, be made in accordance with the shop practice of the Virginia Bridge & Iron Co., of Roanoke, who shall have a representative in Mr. Ferris's office for that purpose.

The design shall be such as to cover the use in the construction of the vessels of only such shapes, flats, bars, plates, etc., as may be obtained easily and promptly under our Schedule B contract 93 S. C. with the United States Shipping Board Emergency Fleet Corporation.

The quality of steel under the new design shall not be greater than that covered by the plans prepared by the Submarine Boat Corporation for vessels of same type

and class they are now building for Fleet Corporation, nor shall the cost of fabrication and erection be greater in the new design than in that of Submarine Boat Company

In consideration for the above work to be performed by Mr. Theo. E. Ferris, the Jahncke Shipbuilding Co., hereby agrees and binds itself to pay to Mr. Theo. E. Ferris the sum of $20,000, to be paid as follows: $4,000 on December 25, 1917; $4,000 on January 10, 1918; $4,000 on January 25, 1918; $4,000 on February 10, 1918, and the balance on the full completion of all plans.

This agreement to be confirmed in writing by both parties, but to be binding on signature by the authorized representatives as shown below.

JAHNCKE SHIPBUILDING CORPORATION,
Per L. H. GUERIN,
Chief Engineer, Authorized Representative.
THEODORE E. FERRIS,
Per T. B. DORNIN,
Authorized Representative.

Agreement entered into this 27th day of November, 1917, by and between the Jahncke Shipbuilding Corporation, hereinafter designated as the purchaser and herein represented by Mr. Ernest Lee Jahncke, its president, and Mr. Theodore E. Ferris, naval architect, hereinafter designated as the contractor, and herein represented by himself, as follows:

1st. This agreement is to confirm and supplement the memorandum of agreement entered into in Washington, D. C., on November 23, 1917, between the purchaser and the contractor, and signed by both parties through their representatives.

2d. The contractor agrees and binds himself to furnish to the purchaser the complete design of a 5,000-ton D. W. capacity, single-screw cargo steamer, in accordance with the specifications and the contract for the construction of said steamers, by the purchaser for the United States Shipping Board, Emergency Fleet Corporation—contract 93, S. C. The plans to be furnished by contractor to purchaser to include all general and detail plans and shop details for the fabrication and erection of all steel framing, plating, etc., also plans of machinery arrangement, piping, drainage, etc.; in fact, all plans necessary to make the work complete in every detail and respect, with the exception of plans of machinery which will be furnished by the purchaser.

The design shall be such as to cover the use in the construction of the vessels of only such shapes, flats, bars, plates, etc., as may be obtained early and promptly under schedule "B" of contract 93, S. C., as these materials are to be furnished to purchaser by the Emergency Fleet Corporation. The quantity of steel entering into the construction of the vessels under this design shall not be greater than that covered by the plans prepared by the Submarine Boat Corporation, of New York City, for the construction of vessels of the same class and type, under a contract with the Emergency Fleet Corporation, nor shall the fabrication and erection be more difficult than that shown by the plans of said Submarine Boat Corporation.

The fabricating details shall, as much as possible, be made in accordance with the ship practice of the Virginia Bridge & Iron Co., who shall have a representative in contractor's office for that purpose.

All plans, as furnished by the contractor to the purchaser, shall bear the approval of the proper representative of the Emergency Fleet Corporation, as well as that of Lloyds and the American Bureau of Shipping.

The contractor further agrees to complete, ready for above-mentioned approval, his work in the following order and on the following dates:

Bills of materials: Midship section, December 5, 1917; stern framing, December 15, 1917; bow framing, December 25, 1917. Shop details: Midship section, December 27, 1917; stern framing, January 20, 1918; bow framing, February 10, 1918.

The midship section item in both cases to cover framing and hull plating.

The hull plating for stern and bow to follow framing in the shortest possible time, after which tank-floor plating and other necessary details shall be completed also in the shortest possible time. All plans to be fully completed on or before March 1, 1918.

All bills of materials and ship details to bear the approval of the representative of the Virginia Bridge & Iron Co., stationed in contractor's office. No bill of material to be sent to purchaser unless work it covers shall have been approved by Fleet Corporation, and by classification societies; this in order to avoid delays and waste of materials.

3d. In consideration for the above work to be performed and service to be rendered by contractor, the purchaser hereby agrees and binds himself to pay to the said contractor the total sum of twenty thousand dollars ($20,000) in installments as follows: December 25, 1917, $4,000; January 10, 1918, $4,000; January 25, 1918, $4,000; February 10, 1918, $4,000. And the balance on the full completion of all plans.

This agreement is final and binding, as signed by both parties at their respective place of business, and is effective as of date November 23, 1917, the date of memorandum of agreement.

——— ———,
Naval Architect, Contractor.

JAHNCKE SHIPBUILDING CORPN.,
Per ——— ———, *President.*

NEW ORLEANS, LA., *November 27, 1917.*
NEW YORK CITY, N. Y., —— *1917.*

DECEMBER 15, 1917.

JAHNCKE SHIPBUILDING CO.,
New Orleans, La.

GENTLEMEN: Attention Mr. E. L. Jahncke re claim for delay nonreceipt of plans — contract No. 93:

The corporation is in receipt of your letter of December 13 on the above subject in which you submit a claim for extension of time of 60 days, because you were not able to secure as promptly as was anticipated the fabricating plans for the construction of the vessels under your contract.

While the corporation is aware that there has been a delay in this matter, it considers that the extension which you claim is excessive. The extension of time which is allowed you for the delay in securing plans is hereby determined as 30 days, in accordance with the provision of Paragraph VII of your contract.

Very truly, yours,

F. R. HARRIS,
General Manager.

DECEMBER 15, 1917.

Memorandum for Department of Inspection and Production (Mr. McAuliffe) Jahncke Shipbuilding Co., Contract No. 93.

The plans and specifications attached to the Jahncke contract No. 93, as originally signed, were of the 5,000-ton vessels building by the Submarine Boat Corporation, and I understand carried the approval of the Fleet Corporation's naval architect and consulting engineer.

The Department of Inspection and Production will adjust the change in cost of the six 5,000-ton ships under this contract. This company has been handed, in the corporation's letter of December 14, 1917, an approved revised midship section, which constitutes a change under the contract; and has been invited to submit an estimate of reduced cost. The letter referred to is a reply to the Jahncke Shipbuilding Company's letter of December 13, 1917, hereto attached.

In my opinion the reduced cost caused by the new plans should not be modified by any question of increased or decreased deadweight capacity, the contract being for the construction of a certain ship for a lump sum price.

——— ———,
Manager Division of Steel Ship Construction.

DECEMBER 14, 1917.

Memorandum for Admiral Bowles—Estimate in change in cost of Jahncke ships due to changed plans.

Supplementing my earlier memorandum of even date with reference to the above, after further thought of the matter I would suggest for your consideration that, after all, it might be correct to give consideration to the contractor for increased dead weight. While the contract specifies standard type of ship, it also specifies a vessel of 5,000 tons capacity. The facts are, the Submarine Boat Corporation ships will run about 5,500 tons and the Jahncke ships will run in excess of this. I p esume the cost of the ships in either case is based on price per dead-weight ton and contracted for at a lump-sum price, and we are really purchasing dead-weight tons. If builder is to give a credit for the cheaper ship, due principally to saving in steel

material, should not the corporation pay for the additional dead-weight tons resulting thereby?

If this might be your conclusion, the Jahncke proposition will stand as follows:

	Per ship.
Credit to the corporation	$10,410
Paid to contractor 35 dead-weight tons at $160	5,600
Credit to corporation	4,810

THEO E. FERRIS,
Naval Architect and Consulting Engineer

DECEMBER 14, 1917.

Memorandum for Admiral Bowles—Estimate of change in cost of Jahncke ships due to changed plans:

Referring to the estimated cost of the Jahncke ships as compared with the Submarine Boat Corporation type, I wish to report that we have made as careful estimate as possible with regard to the amount of steel. However, I have not an exact record of the actual amount of ordered invoice steel for the Submarine Boat people, but this is immaterial as we only want to get a comparison between the two ships. Based on net steel our estimates show the following: Submarine Boat Corporation ships, 1,611 long tons; Jahncke ships, 1,561 long tons; difference, 50 long tons. I am inclined to think, however, notwithstanding the estimate, this is a little low, and am placing the difference at 60 short tons. This would be made up of 28 tons of shapes, 28 tons of plates and about 4 tons of rivets. Therefore the steel saving would be as follows:

28 tons of shapes, at $60	$1,680
28 tons of plates, at $65	1,820
4 tons of rivets, at $95	380
Total	3,880

With regard to the number of rivets saved, due to Lloyd's ruling giving a tolerance for spading the rivets, it is necessary for multiple punching, which is very difficult to estimate. My judgment is, however, assuming 325,000 rivets in the ship, that there will be a saving of about 5 per cent, or 16,000 rivets. This would be over and above the above-mentioned item for rivets, and allowing 5 cents for cost of rivet and driving would amount to $1,280,000.

As to the saving for multiple punching, this is also difficult to estimate, but assuming amount of labor in the hull of the ship and allowing 3 per cent the saving would amount to $5,250,000. This amounts to a total of $10,410 per ship in favor of the corporation.

Since my previous memorandum to you on the matter of these ships I have looked up the contract and find the vessels are contracted for at a lump sum price and that the machinery is reciprocating engines, which I assume weigh about 35 tons in excess of the Submarine Boat Corporation ship propelling machinery. Therefore we have a gain in dead-weight of about 35 tons, and as the contract is lump sum it would not appear right for this gained dead-weight to operate in favor of the contractor, unless you choose to allow it.

There is no cost element entering into the matter of the machinery, for the contract and specifications call definitely for reciprocating outfit, nor is there any cost element entering into joiner work, fittings, gear, equipment, etc. It would therefore appear a fair adjustment of $8,000 to $12,000 per ship in favor of the corporation, or say, $10,000.

The saving to the Virginia Bridge Co. in method of fabrication over the Lackawanna Bridge Co., due to multiple punching and other items, is one can really estimate at this stage, but it seems most advantageous to let each have their way in the matter so long as we get a good ship and the work is up to classification requirements.

In the foregoing I have endeavored to make as fair a digest of the proposition as I am able to do, and believe the adjustment as above mentioned is near correct as we can arrive at.

THEO. E. FERRIS,
Naval Architect and Consulting Engineer

DECEMBER 14, 1917.

JAHNCKE SHIPBUILDING CO.,
New Orleans, La.

GENTLEMEN: The corporation has received a revised midship section submitted by you, which has been approved by the naval architect of the corporation, and which differs in certain details from the midship section filed as a contract plan. Inasmuch as the alteration in midship section introduces an element of change in cost of hull, the corporation understands that this matter will be taken up as a change in the contract as provided by the terms thereof.

You will, therefore, please submit for consideration by the corporation a statement of the proper differences in cost to you resulting for each hull by alteration in the midship section above referred to.

Very truly, yours,

———.
Manager Division of Steel Ship Construction.

DECEMBER 13, 1917.

Memorandum for Admiral Bowles.—Jahncke Shipbuilding Co.:

Replying to your two memoranda of even date with reference to the above, beg to say that the modified plans which are referred to in the Jahncke Shipbuilding Co letter of the 13th instant are the plans which were prepared in accordance with instructions contained in your memorandum of December 5, and supplementary instructions in your memorandum of the 7th, and are the plans to be attached to the Jahncke contract. These plans having been passed by Lloyd's, I am approving same and returning two copies herewith, retaining one copy here for the technical department and one copy to be sent to the district officer, in compliance with this usual procedure.

Your reference to change in cost in the construction of these ships, made in your memorandum of even date and also in your memorandum of the 8th instant, has not been overlooked. I went over the plans the other day in New York, but at that time the construction and matter of scantlings had not been finally approved by Lloyd's, and until this took place I was not able to make an estimate with reference to materials, steel, etc. Since receiving the plans this afternoon, through Mr. Jahncke, we have started in to ascertain the steel weights, etc.

I do not know if I have explained to you fully, or rather if my memorandum to you of the 7th instant made clear to you, all the features of the improved design, which I will now endeavor to do.

When the Submarine Boat Corporation vessels were laid down, because of fabricated conditions, against my desire, no crown was put in the decks, the plating somewhat increased to resist possible corrosion from less drainage of water on the decks, the depth of the ship was increased to get desired load draft in the absence of sheer. I finally, however, persuaded the Submarine Boat Corporation to adopt sheer forward on these ships. This came about, as you will recall, when we undertook to bulkhead the vessel and get a two-compartment ship. At the time of laying down the Submarine Corporation ships, with the idea of building structural steel to manufacturers' standard specifications, we had to add a little weight for the lower tensile, which, however, was finally accepted by Lloyd's, that is, in the final ruling of classification it was not necessary to make this allowance for tensile. Further, the submarine boat people, or rather Lackawana Bridge Co., are not particularly interested in multiple punching.

The Jahncke proposition came along with the ships to be equipped with reciprocating engines, which affected the engine-room bulkheads, tank tops, foundations, engine and boiler hatch, and various matters of this kind, knocking out, so to speak, the fabricated plans and necessitating the installation of different boilers; that is, another make of water tube boiler, and considerable work necessarily had to be done over again. The Virginia Bridge people, as fabricators, had no objection to crown of beam, sheer, which adopted with the 10 inches less depth of the ship gives under British Board of Trade with same load draft and reduction in free board lower numerals in Lloyd's, which saves some steel weight and gives a corresponding increased deadweight of the vessels, besides using ship channels instead of structural channels for framing and beams, which the Virginia Bridge people prefer handling, thus making a somewhat improved ship possible under changed conditions from a fabricating development; and the Virginia Bridge people can handle slightly wider shell plating, one streak having been eliminated.

Now, with the plans approved by classification and scantlings settled we can get at e steel weights. Preliminary figures show 40 to 50 tons saved in invoiced steel.

While I was expecting there would be some saving no definite figures have been made until now. I told Mr. Jahncke this afternoon that there would be some saving which would operate in favor of reduced cost, which seemed to be quite satisfactory to him. Further, we will have some reduction in cost due to lower number of rivets, recently obtaining from Lloyd's a tolerance for variation in rivet spacing. Also I would think some saving in multiple punching. Now that it is possible to get the steel weights figured, I hope to be able by to-morrow forenoon to give you full report on the whole matter.

There apparently will be a less cost in hull, etc., made up of the above matters, but as to the machinery I do not know. In fact, I do not know whether Mr. Jahncke's contract is a duplicate of the Submarine Boat Corporation ships or not. I have not looked this up. Nor do I know whether his ships are based on price per dead-weight ton. If they are, something should operate in his favor as to more dead-weight tonnage. I do not quite see just how the ships could be duplicates of the Submarine Boat Corporation vessels when the machinery is reciprocating against their turbine.

I am returning to you herewith the plans approved, together with Mr. Jahncke's letter of the 13th, and will endeavor to report to you to-morrow as to our estimates with regard to steel weights and my views otherwise affecting the cost.

Naval Architect and Consulting Engineer.

UNITED STATES SHIPPING BOARD.
EMERGENCY FLEET CORPORATION.
Washington, December 13, 1917.

Memorandum for technical department (Mr. Ferris).

In connection with the Jahncke Shipbuilding Co.'s letter of December 13, 1917, asking for an extension of contract time of sixty (60) days, this contract was dated October 18, 1917, and he was entitled to have the contract plans attached to his contract at that date. I understand that the corporation was not in position to furnish Submarine Boat Corporation's plans at that time; and he is, therefore, entitled to an extension of his contract time from that date until to-day, supposing that you are approving the plans submitted in my memorandum to you of even date.

F. T. BOWLES,
Manager Division of Steel Ship Construction.

(CC. Contract Division and Mr. McAuliffe.

DECEMBER 13, 1917.

Memorandum for technical department (Mr. Ferris).
Jahncke Shipbuilding Co.

In connection with the letter of the Jahncke Shipbuilding Co. of the 13th instant herewith, if these plans have been prepared in accordance with the instructions of my memorandum of December 5, will you please return them to me with these papers, stating that they are the plans to be attached to Mr. Jahncke's contract? At the same time, will you please answer my inquiry as to whether or not there is any change in cost of this vessel over what Mr. Jahncke agreed to build by his contract, which was, I understand, a duplicate of the Submarine Boat Corporation ship?

Manager Division of Steel Ship Construction.

WASHINGTON, D. C., December 13, 1917.

Admiral F. T. BOWLES,
Chief of Construction, Emergency Fleet Corporation,
Washington, D. C.

DEAR ADMIRAL BOWLES: We respectfully wish to call your attention to the delay which has occurred, through no fault of our own, in not being able to secure the detail plans for the 5,000-ton fabricated ships under contract by us for the Fleet Corporation.

We ask for an extension of 60 days' time caused by this delay. As you are familiar with all of the difficulties and almost daily troubles we have encountered in this matter, we feel you will agree that our request is fair and in accordance with the intent of our contract.

With the necessary construction work progressing rapidly at our shipbuilding plant, and in view of arrangements we have for machinery and equipment, and, further, that we have a signed agreement with the Virginia Bridge & Iron Co. guaranteeing to us 2,000 tons fabrication per month, we feel that it will be to our mutual advantage if at this time we are permitted to extend our facilities and close our agreements to take care of the six additional vessels as called for under our contract 93 S. C.

We ask that you give this your careful consideration and trust you will authorize us to proceed at once with the six additional ships.

Respectfully submitted.

JAHNCKE SHIPBUILDING CO.
E. L. JAHNCKE, *President.*

DECEMBER 8, 1917.

Memorandum for technical department (Mr. Ferris).
JAHNCKE SHIPBUILDING CO.

Replying to your memorandum of the 7th instant in regard to the design of the Jahncke Shipbuilding Co., it was my intention to have you proceed with the designs of the 5,000 ton vessel with the adaptation for the reciprocating engines and with the fabrication adapted to the practices of the Virginia Bridge Co., Roanoke, Va., plant.

I accept your judgment as to the other changes which you mention, and will be glad to have you proceed accordingly.

At the same time, I judge that the cost of the vessel so produced will be somewhat less than that upon which the contract was negotiated, and if that is true, I would like to have your opinion in the matter.

———,
Manager Division of Construction.

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, December 7, 1917.

Admiral F. T. BOWLES,
Manager Division of Construction.
Jahncke Shipbuilding Co.

DEAR ADMIRAL BOWLES: Your personal letter of the 5th instant with reference to the above is received on my return here from New York. Please accept my apology for this little delay in reply to same.

It would seem the matter is a little unfortunate, but certainly I have no desire to become involved in a matter that appears to be at cross purposes of best intentions; in fact, I did not know the full details until my return to New York this last trip. Strange as it may seem, due to mislaying papers in moving my files from New York, I am not in possession of your letter of September 6, so will you not kindly send me a copy of this letter, that I may interpret the various phrases to which you have referred.

However, this be as it may, it is not my wish to have any conflicting understanding, for I started in to render, in cooperation with yourself, the best services I possess, which has always been my one purpose to the end of success in all undertakings.

I have your memorandum on the subject of these ships and will treat with this by separate letter, but do not just understand which ship to proceed with.

Sincerely, yours,

THEO. E. FERRIS,
Naval Architect and Consulting Engineer

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, December 7, 1917.

Memorandum for Admiral Bowles.
Jahncke Shipbuilding Co.

Referring to your memorandum of the 5th instant in reference to the above, I am not just clear which ship you wish to go ahead with. If an exact duplicate of the Submarine Boat Co.'s hull and construction it must in any event be changed quite considerably with respect to bulkheads, tank top, shaft tunnel, machinery foundations, size of engine hatch and various other matters on account of proper space for the reciprocating engines, which affects to quite considerable extent the fabricated oil drawings.

a order to make the fabrication feature of these ships in conformity with the ctices of the Virginia Bridge Co., Roanoke plant, and in view of the above neces- r changes, it seems vastly more advantageous to retain the ship as to model and eral characteristics to cut the depth about 9 inches and put crown in the decks, ch the Virginia Bridge Co. would rather have, thus bringing the ship under a er numeral and classification, thereby giving the same dead-weight capacity and ttle less draft, which also is advantageous to speed. Proceeding along these lines cause less delay and give more satisfactory all-around results.

lease put me straight as to what your wishes are and I will do the best possible to n the situation up

THEO. E. FERRIS,
Naval Architect and Consulting Engineer.

DECEMBER 7, 1917.

T. E. FERRIS,
Washington, D. C.
ncke Shipbuilding Co.

EAR MR. FERRIS: Replying to yours of this date, I am inclosing copy of my letter ou of September 6, 1917.

lease do not think that I have not appreciated the spirit of cooperation in which have entered into the work with me and which I hope may continue.

Very truly yours,

Manager Division of Construction.

DECEMBER 5, 1917

THEO. E. FERRIS,
Naval Architect, Washington, D. C.
ncke Shipbuilding Co.

EAR MR. FERRIS: Mr. Jahncke called at my office to-day on some other business I asked him who the naval architect was who was preparing his plans, and he me that it was you; and he told me the terms, when I pressed him for it, under h you are preparing the plans.

think you must have overlooked the contents of my letter of September 6 in which id to you, "It will not be possible for you to receive compensation for any work in this matter from any company acting as agent or contractor of the Fleet Cor- aion." The remainder of the letter also emphasizes similar conditions.

ith these provisions in view, I have sent you a letter of this date authorizing you, ehalf of the Fleet Corportaion, to prepare the plans required by Mr. Jackson.

hen this work is completed, please understand that all work in your New York e for the Emergency Fleet Corporation must stop.

Very truly, yours,

Manager Division of Construction

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, December 5, 1917.

norandum for Mr. Ferris.
ncke Shipbuilding Co.

he Jahncke Shipbuilding Co., who are contracting to build six 5,000-ton fabricated els under their contract No. 93 but are arranging to install in them the six recipro- ng engines building by the Ellicott Manufacturing Co. which necessitates some nge of detail, they were authorized by me to obtain from the Submarine Boat poration a complete set of detail plans for which they were to pay the Submarine t Corporation, as our agents, a suitable sum which would, of course, be credited our account.

n account of the changes before referred to the Jahncke Co. has asked the corpora- to make the necessary changes in the plans and provide them with a complete of details. In order not to delay in the construction of the vessels, Mr. Jahncke eing to pay the actual cost of the work involved, I authorize you to prepare the s accordingly. Such work as you find it convenient to do in your New York e will be charged to the corporation in a separate account and the ch[illegible]ch

work will be paid for under the terms of Gen. Goethals's letter of April 27, 1917; such work as is done in the corporation's drawing office will be charged for at the actual cost of labor and materials, and a separate account of that will be rendered.

H. T. POWERS,
Manager Division of Construction.

NEW ORLEANS, *November 30, 1917.*

Admiral F. T. BOWLES,
Manager Contract Division,
Emergency Fleet Corporation,
Washington, D. C.

DEAR ADMIRAL BOWLES: I regret extremely that there has been a misunderstanding regarding the detail plans for the 5,000-ton steel vessels, in reference to our contract 93 S. C., and I am taking this opportunity of explaining to you just what our position has been for the past six weeks, since we signed this contract.

It was understood at that time that we were to get the detail shop drawings from your agent, the Submarine Boat Corporation, and after you had written letters on October 30 to the Submarine Boat Corporation, I had a personal conference with their Mr. Wortham, president of the Lackawanna Steel Co., and Mr. Sutphen, general manager.

I showed to them your letter and they were entirely agreeable to furnish all shop drawings and further suggested that we have our representative at their yard and get all the information which would be necessary and useful to us in the construction of our vessels.

This agreement was based upon our paying a proportion of the cost of preparing shop details in the ratio of the number of ships they had under contract and those which we were to build.

They further stated that the cost to date was approximately $38,000 and that they could reasonably assure us that the cost for this work would not exceed $1,000 per ship. With this definite understanding, which I agreed to, I left for New Orleans, feeling that everything had been arranged satisfactorily and that we would have no delay or any trouble.

Please understand, that we could use only part of the shop details of the Submarine Boat Corporation, as it was necessary to make special detail plans for the propelling machinery, as in our case our contract called for reciprocating machinery, whereby their contract called for turbine outfit.

We immediately made arrangements with our naval architect to prepare the shop detail drawings necessary for the portion of the ship which was changed under this arrangement. The cost of these changes to us and the cost which we were to pay the Submarine Boat Corporation for their plans, was considerably more than we had originally figured on.

Upon my return to New Orleans, I gave definite instructions to our chief engineer, Mr. L. H. Guerin, to proceed at once to the office of the Submarine Boat Corporation and take with him the representatives of the Virginia Bridge & Iron Co., with which concern we have signed contract for the fabrication.

I was astounded to receive a telegram advising that Mr. Sutphen would not agree to furnish us the plans for which we had made arrangements in accordance with your letter and in accordance with my understanding with Messrs. Wortham and Sutphen.

Our engineer then went to Washington and after an interview with Mr. Cox he was assured there would be no further difficulty about the Submarine company furnishing the plans, and he was given a copy of the letter which the Fleet Corporation had sent to Mr. Sutphen.

Thereupon, our engineer left again for New York and visited Mr. Sutphen for a second time.

Mr. Sutphen acknowledged he had received the letter from the Fleet Corporation, but stated he had not changed his mind, and further advised, before doing anything at all, he wished to consult his attorney, as he believed the Fleet Corporation had no right to issue order to them to give these plans to another shipbuilding company. He also stated that he had discussed this matter with Admiral Capps, in New York, and that the admiral had stated that he agreed entirely with Mr. Sutphen.

Under these circumstances, having tried three different times, unsuccessfully, to secure the shop detail plans from the Submarine Boat Corporation, and feeling that no matter what orders they would receive they would be unwilling to furnish us

slightly larger dead-weight tonnage capacity and, further, a design which had approved as one which would produce a more satisfactory ship.

Mr. Guerin's return to Washington, after he had made these [illegible] a New York, he had another interview with Mr. Cox, who advised that M[illegible] had replied to their second communication, stating he would not [illegible] e plans, for the reason stated previously, but Mr. Cox had [illegible] ing to send him another communication, after which he thought [illegible] rther refusal.

received a telegram from our office Washington, [illegible] Mr. [illegible] stating that uld agree to furnish us with the plans [illegible] at we had instructed our architect to proceed with the new arrangement [illegible] were forced to do it because there were more than [illegible] week in New York pending a decision from [illegible]

el, that after six weeks [illegible] ie and not getting anywhere and although the [illegible] ter had to be settled up as quickly as possible. [illegible] these plans you will approve [illegible] ceptable to Lloyd's and to yourself.

m as the general arrangement plans and [illegible] ill come to Washington and present them to you [illegible] will be more than pleased with the result.

nclusion, we wish to thank you for the personal [illegible]

rtainly appreciate the cooperation which your department has extended [illegible] ring to secure for us a square deal. We regret more than you do the [illegible] misunderstanding particularly as it has seriously delayed the [illegible] m.

ncerely hope that now as you understand the matter [illegible]

Respectfully

[illegible]
By [illegible]

[illegible]

EUGENE E. FERRIS,
ral Architect, [illegible]
Executive [illegible]

secure people who will be capable of independent action under your direction in technical and construction matters. You will appreciate that, in order to carry on expeditiously the work that we have in charge, it will be necessary, as far as possible, to decentralize and give authority to our representatives to act on as much as possible of matters of plans and inspection on their own initiative, but in cases where you inspect work in progress you will be given full authority over district officers and local representatives. These conditions would also refer to the fabricated ship construction in which I consider it absolutely necessary that you should maintain your interest and supervision. However, it will not be possible for you to receive compensation for any work done in this matter from any company acting as agent or contractor of the Emergency Fleet Corporation. Where you have existing contracts with owners for the design and supervision of vessels under construction which have been requisitioned, you will be permitted to carry these out with the understanding that they do not conflict with the affairs of the corporation.

In coming to Washington I expect you to bring your head men, and I consider it proper that they should have some increase of salary for what may be a temporary change. Your own compensation or fee from the Emergency Fleet Corporation will remain as at present, but employees brought to Washington will be placed on the pay roll of the corporation. I would like to reduce the amount of work to be done for the corporation in your New York office to a minimum; and while I appreciate that something might be conveniently done there with reference to classification societies, hope it will be possible for you to limit the work done there to that purpose. The charges for such work would be paid for under the terms of Gen. Goethal's letter of April 27, 1917.

If, in connection with this move, you feel it necessary to present to the corporation any consideration in regard to the lease of your office space, please do so.

I have no objection to the continuation of your private business in New York and the retention by you of your present clientele provided the corporation's business has the preference and that you shall give your time to it preferentially with the understanding that your private business will not in any way conflict with that of the corporation.

I have shown this letter to Admiral Capps, and it meets with his approval.

Very truly, yours,

——— ———,
Manager Division of Construction.

NEW YORK, *September 3, 1917.*

Admiral FRANCIS T. BOWLES,
Emergency Fleet Corporation, Washington, D. C.

MY DEAR ADMIRAL BOWLES: Referring to our recent discussion in regard to my work with the corporation and a more concentrated effort working with you at Washington, that I would write you, dealing with certain phases of the matter.

1. I inclose herewith copy of my letter of April 25 to Gen. Goethals; also a copy of his reply under date of April 27, setting forth our working arrangement which I understood was confirmed by the Shipping Board. The substance of the understanding you will observe is that I was to render services as naval architect and consulting engineer to the corporation without specified amount of time, free to carry on my own private business and maintain my establishment in New York, unless other adjustments might be made.

2. When Gen. Goethals retired, I naturally felt that Admiral Capps might wish to select someone else of his own choice, although appreciate I have been connected with the work from the beginning, and my training has been entirely in commercial work, having planned and followed the construction of various types of ships built in many of the yards of this country, resulting in quite a large acquaintance with the shipbuilders, their methods and procedure in the various yards; also have been closely allied with the steamship operators, deriving experience in this direction, and seemingly have been able to stand on my own bottom in the various problems dealt with, in view of which you may deem it more advantageous to have me continue.

Under date of August 12, I wrote Admiral Capps a letter, copy of which is also inclosed and is selfexplanatory, to which up to the present time I have received no reply. However, it is my understanding that your talk with me is to the end of disposing of the matter contained in this letter and the adjustments we may conclude will be satisfactory to Admiral Capps.

3. If my services are to be continued with the corporation in the same capacity as at present, I am willing to go to Washington and work with you, and do the best that

had a large volume of work, and the additional volume of work they could
as in a sense limited, it then became necessary, as I saw the situation, if a
of tonnage was to be produced, that a new method or a new source had to be
I worked strenuously and spent a great deal of time investigating what now
be a common term, "fabricated" ship. It was necessary to accommodate
ding practice to the bridge and tank building, and vice versa, in order to see
in such a program. The number of duplicate ships presented possibilities,
ly, after a vast study of the matter and more or less continuous conferences
bridge builders, indorsed the program as possible, not that I had any personal
ite to the contrary—believed it a duty to be instrumental so far as I possibly
a new and added productive proposition that in any way seemed possible.
go into details concerning this matter is unnecessary; but with your permis-
say that to eliminate me from following through with the "fabricated" ship
ould, I consider, be more unfortunate than anything else that could happen.
se of the Submarine Boat Co., I have been planing and working out the ship
. for which I was to receive additional compensation, the amount of which has
yet been adjusted, and up to date, I personally have received no compensa-
which was unsolicited on my part. When the matter came up, I referred
. Goethals, and he stated to me that it was satisfactory for me to handle the
them and considered it advantageous under the circumstances and for me to
at private financial adjustment with the Submarine Boat Co. that was satis-
I do not wish to have anything misunderstood or kept in the dark in this
The fact that no financial adjustment has been made to date, and I not receiv-
ompensation, is quite evident that my wishes and ambitions have been aimed
d of endeavoring to develop tonnage production on what might be termed a
hod and quite to the end of vindicating my indorsement of same. This is
reason why I want to carry it through.
going to Washington and bringing my head men will require financial adjust-
their behalf on account of their homes being here and a reasonable increase
for what may be a temporary change. All my employees receive compen-
r overtime work which I find to be advantageous. Overtime is on straight-
is. In other words, the men are paid for the number of hours they work.
order to do effective work at Washington, that the matter of overtime and
ould be left in my hands to adjust. In fact, this should apply to the whole
l department, concerning which it is more than probable I will wish to make
r of changes and adjustments. In regard to compensation or wages of my
n here and adjustment of their moving, will discuss this with you and present
nt for consideration Tuesday or Wednesday.

view of the fact that I increased my office space very materially with a view of carrying on the corporation's work at New York, some consideration must be given to the term of lease I now have on an office which would not have otherwise existed and which I am now obliged to carry in view of the present contemplated change in plans.

7. In being in closer contact at Washington and handling the technical department, which I understand is your wish, feel that these duties alone would not be satisfactory, for in order to carry the work through, I must have cooperation with you; quite a vast amount of direction of the real construction work and more or less personal contact at the various yards, for it has been my experience that in this way the greatest amount of work can be accomplished. Please do not understand that I wish to cast reflection on the present organization of district officers, field officers, etc., but I do feel advantageous adjustment can be made that would be effective. There are also other matters, if my picture of the situation is correct, the high spots are to keep the shipbuilders straight in the way of detailed plans, information, etc., and personal contact as to what to do; the utmost done to see that materials are produced as needed; the labor situation in some way controlled and necessary skilled labor increased, together with sufficient personal magnetism to uplift and prevent discouragement.

Believe if we can understand each other most frankly and I know what you want to do and also know what you want me to do; we can work together to good purpose. There has been ups and downs already and of course such will continue to a more or less extent. The thing, however, as I see it, is to drive ahead and accomplish results.

Respectfully, yours,

THEO E. FERRIS.

AUGUST 12, 1917.

Admiral W. L. CAPPS, *General Manager,*
Emergency Fleet Corporation, Washington, D. C.

MY DEAR ADMIRAL CAPPS: In regard to my connection with the corporation, respectfully submit the following:

Have been thinking a good deal over the situation and thought it well to write you this letter of explanation so that you might give it consideration and the matter could be discussed at a reasonably early date.

When Gen. Goethals opened the subject with me about undertaking the work in my line for the corporation, I was reluctant about the matter because of having a well-established business and the obligations which I was under to various clients. To indicate how extensive this was, may say that at about the time this country entered the war the commercial work I had in hand aggregated approximately $15,000,000 in value. However, I accepted the appointment because Gen. Goethals was insistent that I do so, but with the understanding, which seemed to be the only practical arrangement, that I retain headquarters in New York and be here to carry on my private business, much of which has suffered a great deal because of my almost constant duties in connection with the work of the corporation. In fact, in the case of certain clients, a little embarrassing. Of course, much of my private work heretofore pending is in a way automatically disposed of in view of the requisitioning of merchant vessels, yet under arrangements made I have my obligations here.

Since you have been in charge of the corporation there has not been an opportunity to discuss matters at length with you and for that reason I am writing you this letter to ascertain your views and wishes. However, on one occasion you did make reference to my transferring my establishment to Washington. Of course, this would, no doubt, seem the better arrangement in the interest of the corporation, yet it presents a number of difficulties and makes it necessary that some adjustments be made with those of my staff who might go to Washington. In any event, so as not to lose my business connections in New York, it would seem necessary that my office continue here and that I be here, at least, week ends because of the obligations of my business which it is necessary to take care of from New York, and I suggest that a portion of my staff remain here.

I might add in connection with the above that if you should choose to appoint some one of your own selection, differently situated, to succeed me, I shall, of course, be glad to be relieved, continuing until such time as all matters are adjusted to your entire satisfaction, if this might be your wish.

I submit the foregoing in a most kindly spirit, with every hope that the matter may be adjusted in the most friendly way, and will appreciate an expression of your views.

Yours, respectfully,

THEO. E. FERRIS.

UNITED STATES SHIPPING BOARD.
Washington, April [illegible], 1917.

Mr. THEODORE E. FERRIS,
30 Church Street, New York, N. Y.

DEAR SIR: Acknowledging receipt of your letter of April 25, I beg to advise you of your appointment as naval architect and consulting engineer to the United States Shipping Board, Emergency Fleet Corporation, effective April 16, 1917.

For this service you are to receive a fixed fee of $2,500 per month for your personal services. In addition you will be reimbursed for all cost of labor and wages of your men expended on account of work for the corporation, on a basis of actual time and wage received, plus 30 per cent to cover overhead, rent, telephone service, stationery supplies, drawing materials, and insurance.

Further, you are to be reimbursed for the cost of blue prints, telegrams, models, traveling and hotel expenses for yourself and assistants when traveling in connection with our work.

Very respectfully,

GEO. W. GOETHALS.

APRIL 25, 1917.

Gen. GEORGE W. GOETHALS,
United States Shipping Board, Emergency Fleet Corporation,
Washington, D. C.

SIR: Referring to my compensation and expenses in connection with rendering services to the United States Shipping Board, Emergency Fleet Corporation as naval architect and consulting engineer, working with you in your position as manager, I have to submit the following:

I will render services in the above-named capacity for a fixed fee of $2,500 per month. In addition my office staff will undertake to handle such work as may be required, on the basis of labor or wages of my men expended on account of your work plus pro rata amount of 30 per cent on same to cover overhead cost of my office, made up of rent, telephone service, stationery and supplies, drawing material, insurance, etc. Further, in addition, direct charges will be made to you for such matters as blue prints, telegrams, models, traveling and hotel expenses of myself and assistants. An accounting of hourly labor charges will be made for each hour spent on your work, made up of straight time and overtime, both at the same rate. A statement will be rendered you each month, made up as follows: Fixed fee, traveling expense, direct charges, office charges, overhead on office charges.

It being the understanding that I, acting in the capacity designated, will give to your work all the time I can without specified amount. It has at present occupied your work foremost; it also being understood that I shall be able to carry on my private business and continue to render future services to my clients that the construction work now in progress for them will not be interrupted without my being informed of such interruption, and I shall be able to maintain my establishment in New York, unless later developments warrant a different practice, in which case different financial adjustments will be made, and that any additional expense that may be necessary to handle your work with increased number of staff will be subject to my consent and discretion.

It is also understood that the foregoing arrangement is supplementary to the understanding with the Shipping Board for general plans and specifications for standard wooden ship, to be paid for at a flat sum of $5,000.

If the foregoing is acceptable to you, it is my understanding that you will advise me in writing officially, making the appointment based upon and stating to me what date this arrangement became effective, it being understood the appointment will continue in effect until conditions change, making such [illegible].

Yours, respectfully,

[illegible]

(Thereupon, at 2.05 p. m., the committee proceeded to the consideration of executive business, and at 5 o'clock p. m. adjourned to meet at 2 o'clock p. m., Tuesday, January 29, 1918.)

ED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

TUESDAY, JANUARY 29, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

mmittee met, pursuant to adjournment, at 2 o'clock p. m., mean U. Fletcher presiding.

t: Senators Fletcher (chairman), Ransdell, Vardaman, Nelson, Jones, Sherman, Calder, and Johnson.

AIRMAN. Gentlemen, there is a Mr. Perham present and he take about 5 minutes to explain to the committee his views rd to the kind of ship which he thinks should be constructed. rham, the committee will hear you now.

ENT OF MR. CHARLES F. PERHAM, OF LOWELL, MASS.

RHAM. It will only take me a few minutes to explain my . Chairman.

AIRMAN. Where do you live, Mr. Perham?

RHAM. Lowell, Mass.

AIRMAN. What is your business?

RHAM. Farming.

AIRMAN. Have you had any experience in the building of anything of that kind?

RHAM. No; I have done mechanical work and civil engineer-

AIRMAN. You may proceed to state to the committee what 1 is.

RHAM. My idea is that the ships we are making are very nk by a torpedo; and that it seems that it would be practi- nake a ship that would not sink so easily. I would not make cular claim for my own idea, but I think somebody ought to ship that would meet a submarine without going to the

ith that in view, I would make several long cigar-shaped , pointed at both ends, and place them under a large deck [indicating with pasteboard model]; if they were 30 feet e would not be more than four or six of them; if they were ng there would be more of them. The ship might be 400 or long, according to the strength of the material, and 400 or wide. And with one captain and crew, they could perhaps),000 or 500,000 tons of freight on deck.

hould have described this, perhaps, a little more first. This made up in this way [indicating]: You see the end here

[indicating]; there [indicating] is the head in there; and we will make a larger number of water-tight compartments in each pontoon.

Now, that [indicating] being round, a torpedo hitting one of those, or even if it hits where a partition was and hits two of them, the air could not come out to the top and the water could not fill it more than halfway full. Even if you had several of them filling at the same time, and 200 of them, the ship would keep on going.

Another advantage is the shape of them; a flat piece will bear no weight at all. But if you roll it up like this [indicating] it will be so strong that you can almost put your weight on this piece of cardboard. Now, by making it cylindrical, and doing away with the bulkheads, you do away with your keel, and half of your framework; and you would save half the time, the material, and the expense necessary in building a ship. I imagine that in two or three months you could build one of these ships, where you would be 13 months in building the ordinary steel ship.

Senator NELSON. Would you make those ships of paper?

Mr. PERHAM. We would make those ships of steel, or reinforced concrete. I was very much pleased at what the concrete-ship man had to say before the committee last Saturday. And I think I can say something that he did not say, and that is that as those ships grow older, they would grow better; they would not deteriorate with age. A wooden ship has to be painted every six months; and that means every other ship now, when they take three months to make a round trip. A steel ship would rust; but the concrete ship would keep together better. I believe the concrete ship has another big advantage, that it would not interfere with our building of steel ships. I think the same amount of labor and money and time will produce four times the amount of tonnage in that form, and you would be sure of getting the stuff over there, and getting it over there dry.

They have a scheme that I think they are going to try; they have ordered some bags made to help float the ships that are torpedoed; but even if those bags of air should keep the ships afloat, the cargo would get wet; you might save the ship and ruin the cargo. If you had a cargo of wheat, I do not know whether it would be ruined by salt water or not.

The CHAIRMAN. Have you submitted your plan to the Shipping Board, or the Fleet Corporation, or shown it to the people down there who have to do with passing on designs of ships?

Mr. PERHAM. I have talked it over with them. They thought I wanted to build them too large. But they tried one pontoon. I told them it would be something that would be easy to find out; it would not be a tremendous expense to make them; The sea lifts the boat first at the end, and then in the middle. They experimented to see how big they could make them.

Senator NELSON. Your plan is to have a flat bottom ship, with a number of those pontoons under it?

Mr. PERHAM. A flat deck and

Senator NELSON (interposing). Would those pontoons be in the bottom of the ships?

Mr. PERHAM. Those would be in the water, and this [indicating] would be perhaps 20 feet above the water.

Senator NELSON. You would have them on the sides of the ship, then?

Mr. PERHAM. Yes; I would have four or six of them. I might make as many as 10 of them, and then make the ship 400 feet wide.

Senator NELSON. Your idea is that the ship would float even if a torpedo struck it?

Mr. PERHAM. You could have half a dozen torpedoes strike it.

Senator NELSON. But suppose the torpedo blew up everything about the water, what then?

Mr. PERHAM. It would hit this pontoon here [indicating] and might blow up this one [indicating], and break this one [indicating], and perhaps sink the ship a few inches; but there would be several more pontoons around here [indicating] that the torpedo would not touch. And after the submarine fired one torpedo, the American torpedo-boat destroyer would have a chance to get at the submarine and prevent it from sending any more torpedoes. When you once get a chance to locate a submarine, you destroy every chance of that submarine.

Senator VARDAMAN. It would be a good thing if you could suggest to the committee some method of locating the submarine.

The CHAIRMAN. Of course, Mr. Perham, you understand that the committee can not pass on your plan.

Senator NELSON. No; I would suggest that you prepare a model and specifications of your design and submit it to the Emergency Fleet Corporation.

Mr. PERHAM. Well, my idea was not so much as to that particular plan, as it was to impress upon the Shipping Board the necessity of getting some unsinkable ship. There have been probably a thousand different models submitted; but if the committee would like, I will make a small model. I think that would be enough to show the advantages of using pontoons.

Senator NELSON. I would suggest that you prepare a regular model and submit that, with specifications, to the Shipping Board; and then you can give it a trial in some pool of water, in order to test it.

Mr. PERHAM. One thing I forgot to mention was that instead of riveting the plates in the ship altogether, I would weld them together which is much stronger and can be done much quicker. They can make a weld almost as quick as they can rivet the plates; but to rivet the plates together is a big job, which takes several times as long and is not as strong. Where each one is welded together, I would put a piece inside, and let the outside plate be welded over that, as well as welded onto the plate next to it, and make a stronger at the joint than it is anywhere else. The United States Bureau of Standards says that a welded joint runs from 75 to 75 per cent the strength of the plate; a riveted joint can anywhere near that strength.

Thank you, gentlemen, for hearing me.

The CHAIRMAN. Gentlemen, Mr. Stern is present, and I suppose that we hear from him now something more about the Pierce matter.

Do you know, Mr. Stern, who had it, or will the representative of the Clinchfield Navigation Co.?

STATEMENT OF MR. CARL S. STERN, ASSISTANT COUNSEL, EMERGENCY FLEET CORPORATION.

Mr. STERN. Yes, Mr. Chairman. I know merely from what I have seen in the files. I think that data might be of some assistance.

Senator NELSON. Had we better not ask him first, Mr. Chairman, so as to get it in the record, what his official position is with the Shipping Board?

The CHAIRMAN. Yes; will you give your full name, Mr. Stern?

Senator NELSON. And also your occupation.

Mr. STERN. My name is Carl S. Stern.

The CHAIRMAN. What is your relationship to the Shipping Board and the Emergency Fleet Corporation?

Mr. STERN. I am a lawyer. I am one of the counsel for the Emergency Fleet Corporation. My title is assistant counsel.

Senator NELSON. How long have you been with the Fleet Corporation?

Mr. STERN. I have been with the Emergency Fleet Corporation, off and on, since the 11th day of August, 1917.

Senator NELSON. Where were you before that?

Mr. STERN. Before that I was one of the attorneys for the War Industries Board, and prior to that I was a practicing lawyer in New York.

Senator NELSON. Were you a member of any firm there?

Mr. STERN. Yes, sir; I was a member of the firm of Engelhard, Pollak, Pitcher & Stern.

Senator NELSON. Had that firm anything to do with shipbuilder or shipbuilding?

Mr. STERN. I think that that firm had had—we represented the Lone Star Shipbuilding Co. My office also represented some parties who were intermediaries with regard to a vessel that was requistioned.

Senator NELSON. Lone Star?——

Mr. STERN. The Lone Star Shipbuilding Co.

Senator NELSON. Where was that located?

Mr. STERN. That was located in Texas. There has been nothing, of course, that has come up to me since I have been employed by the board that referred to the Lone Star Shipbuilding Co.; and if anything did come up, of course it would be taken care of by some of the other lawyers.

Senator RANSDELL. How long have you been practicing law, Mr. Stern?

Mr. STERN. I have been practicing law 10 years.

The CHAIRMAN. Were you a member of the firm that you have mentioned?

Mr. STERN. Yes, sir.

The CHAIRMAN. You are the Mr. Stern whose name appears in the firm?

Mr. STERN. Yes, sir.

Senator CALDER. Where are the offices of that firm?

Mr. STERN. In the Trinity Building, 111 Broadway, New York.

Senator NELSON. Are you still in that firm?

Mr. STERN. I am still in that firm, to this extent, that I certainly do not intend to retire from it, and I expect to join it again when I go back there. I have not drawn any money from the firm since

I have come down here, but I have still a contingent financial interest in it.

The CHAIRMAN. Were you employed or did you volunteer your services?

Mr. STERN. I volunteered; and I joined the law committee, of which Mr. Bulkley was the head. We first represented the General Munitions Board, and then after the General Munitions Board was taken over by the War Industries Board we became counsel for the War Industries Board.

I came over with Mr. Bulkley as a volunteer on the 11th day of August, 1917. That was the time when Mr. Cotton and his law staff had resigned and Admiral Capps was without a law staff. So we came over as emergency lawyers.

We tried to get that great mass of contracts off and signed up; and then, at the end of August or the beginning of September, feeling that the law department was in shape, I went back to the War Industries Board.

The Emergency Fleet Corporation was hampered a little bit later on, and I came over again as a volunteer, a substitute; and when I started to go back to the War Industries Board Judge Payne, who was then the chief counsel of the Fleet Corporation, asked me if I would not stay on permanently. So I have been there permanently since about the middle of October, or the 1st of October.

Senator JONES. What is your compensation?

Mr. STERN. Well, I am now getting $4,250.

Senator JONES. A year?

Mr. STERN. Yes.

Senator CALDER. Are you a native New Yorker, Mr. Stern?

Mr. STERN. No; I am a native of Georgia.

The CHAIRMAN. Mr. Stern, you may proceed to state what you know regarding the people who had to do with the contracts between the Emergency Fleet Corporation and the Clinchfield Navigation Co., and how you got that information.

Mr. STERN. Yes, sir. Of course, I know nothing of my own knowledge about the Sloan Shipyards until about October. In October there had been an investigation of the condition of the Sloan Shipyards and the matter was referred to me for a recommendation.

From that time on I have had personal charge of it, and I know of my own knowledge everything that happened since that time. Prior to that time I merely know what I have gleaned from the records. And I assume that what you want, Mr. Chairman, is a statement of what the records show.

Senator JONES. Then, is there anybody down there at the Shipping Board or the Fleet Corporation who does know of his own personal knowledge about those things?

Mr. STERN. No, Senator Jones; for the reason Mr. Cotton, who drew up the contract, left.

Senator NELSON. Where is he now?

Mr. STERN. He is in New York. Gen. Goethals, who has charge of the particular contract, is over in the War Department. So that there is no one——

Senator JONES (interposing). Well, Mr. Cotton would not be hard to get at, would he?

Mr. STERN. Oh, no.

Senator CALDER. Does Mr. Cotton represent any shipping interests now?

Mr. STERN. I do not know. Mr. Cotton is a member of a very prominent law firm up there—Spooner & Cotton. I have never heard of that firm in connection with any shipbuilders, but I should not be surprised if they did represent some shipbuilder.

Senator NELSON. Does that firm include ex-Senator Spooner?

Mr. STERN. Yes, sir. The original contract was contract No. 6——

Senator NELSON (interposing). Now, is there not something before that? Is there not some correspondence leading up to that?

Mr. STERN. Yes.

Senator NELSON. Well, commence with that; commence with the beginning and tell us the first initiation of that whole matter. Before the written contract was made, what took place with regard to the matter?

Mr. STERN. Yes, sir; of course, you understand that I am merely summarizing the letters from the files in speaking of this.

Senator NELSON. You have the letters?

Mr. STERN. I have the letters; they are all here.

Senator NELSON. Well, what was the beginning of it? Who made the first proposition?

Mr. STERN. So far as I have been able to ascertain, the first proposition was made through a letter from Mr. Ferris to Gen. Goethals—the letter that appears in the record.

Senator NELSON. Do you mean that letter of introduction that already appears in the record of these hearings?

Mr. STERN. Yes, sir; prior to that, of course, there were contracts between the Clinchfield Co. and the Sloan Shipyards Co.; and perhaps I had better give you a brief summary of that, because that will enable you to understand the situation more clearly.

Senator NELSON. Yes.

Mr. STERN. In November of 1916 the Sloan Shipyards Corporation had a contract for four ships with a man named Archer. Those four ships are the four motor ships.

Senator NELSON. Well, we do not care about them; go on to the other contracts.

Mr. STERN. Yes; that contract was taken over by the Clinchfield Co. On March 31, I think it was, of 1917, the Clinchfield Co. entered into a contract with the Sloan Shipyards Co. for four steamers. The contract price of those four steamers was stated to be $425,000. That price was reduced to $385,000 for reasons that do not concern us, and the reasons have been stated by the Clinchfield Co. one way and by the Sloan Co. another way.

The Clinchfields' explanation of the change is that it was in consideration of their giving up their right to certain commissions that they had theretofore earned and of their promise to pay the Sloan Shipyards Co. a commission if they ever sold the motor ships.

Mr. Sloan's explanation is that he was at that time offering the output of his yard to various steamship concerns for $425,000, and therefore he put in the figure $425,000, because he did not want the other people with whom he was negotiating to know that he was selling ships to the Clinchfield Co. cheaper.

But, at any rate, the fact remains that the Sloan Shipyards Co. had a contract for four steamers with the Clinchfield Navigation Co. at $385,000 per vessel. That was on March 31.

Senator VARDAMAN. 1917?

Mr. STERN. 1917. At the same time, the Clinchfield Co. state—and we find it in a letter from the Clinchfield Co. to Mr. Ferris—that they had an option for 12 more steamers.

Senator NELSON. Let me ask you there: Is there nothing in your files in regard to that option? Have you not the option contract in your files?

Mr. STERN. No.

Senator NELSON. Have you ever seen it?

Mr. STERN. No.

Senator NELSON. Does anybody know what it is?

Mr. STERN. I will say this, Senator Nelson: It was never important for us to know just what that option concerned. I mean it was never important since October to know what that option concerned. The same account of the terms is given by the Clinchfield Co. and by Mr. Sloan. They both agreed that the Clinchfield Co. had an option on 12 more vessels at 5 per cent, and I understand that the price was $140 per dead-weight ton. Mr. Crowell, the attorney for the Clinchfield Co., tells me that that was the price.

Senator NELSON. Now, I want to call your attention to what Mr. Sloan testified to here the other day about that. He said in that option there was no agreement as to price.

Mr. STERN. Well, that may or may not be true. I am merely giving you what I am informed about it.

Senator NELSON. Then, all that you knew down there—all that you officers of the Shipping Board knew—was that between them, the Clinchfield Co., and the Sloan people claim that there was an option contract of some kind?

Mr. STERN. That is all we know.

Senator NELSON. And you do not know the nature of it?

Mr. STERN. No.

Senator NELSON. Or when it was in fact made?

Mr. STERN. Well, we know that both sides conceded that it was made in March or April.

Senator NELSON. That is, both of those two?

Mr. STERN. Both of those two.

Senator JONES. In March, or April?

Mr. STERN. In March or April.

Senator JONES. The two people that were involved claimed to have done that.

Mr. STERN. Yes: those two people claim to have done it.

Senator RANSDELL. Was not the Shipping Board concerned in that contract or the Emergency Fleet Corporation? It must have been a contract with some one. Who was it in the Shipping Board that saw that contract?

Mr. STERN. Well, you see it was probably true and ought to have been true, that somebody in the Shipping Board ought to have seen in the beginning what the relations between the Clinchfield Co. and the Sloan Co. were. I can imagine that in the rush of work at that time, nobody paid any attention to it because at that time they only interest was to see that they were getting vessels employed. And they were. I imagine that $140 was not a high price to pay for vessels in the condition of the market then existing.

Senator RANSDELL. Even when the Sloans were willing to build those vessels for $385,000 for the Clinchfield Navigation?

Mr. STERN. It may be that they made a very good bargain, and perhaps in the beginning somebody should have seen that. But the only thing I can tell you of my own knowledge—all the rest is conjecture, or my opinion about what somebody should have done—I can tell you of my own knowledge what happened in October. In October, when we came to fix up this situation, we came to a situation that was finished; and that was then a question of remedying that situation and getting all the facts that were necessary to enable us to remedy it.

Senator VARDAMAN. Let me get this straight in my mind: The 12 ships for which the option was taken were the same ships that the Sloans were to build for $385,000, were they?

Mr. STERN. I do not believe that, sir.

Senator NELSON. They were the same class of ships?

Mr. STERN. They were the same class of ships.

Senator NELSON. I mean the same class of ships, and the same cost?

Mr. STERN. So far as I know they were the same cost—except that, as to those ships, I was told this morning by the attorney for the Clinchfield Co. that those ships were given to them under option at $140 per dead-weight ton.

Senator VARDAMAN. What is that for the ship?

Mr. STERN. That would make about $448,000 apiece for the 12 vessels. I asked Mr. Sloan ——

Senator NELSON (interposing). But that does not tell him what the contract price was. The contract price was ——

Mr. STERN (interposing). I am coming to that, Senator Nelson. It is conjecture here again; but I asked Mr. Sloan how he made up that difference between $140 per dead-weight ton and $490,000, and he said that was the amount required to make them conform to the Ferris type, which would make the difference, you see, about $42,000. At any rate, the Clinchfield Co. had a contract for four steamers at $385,000, and it has been conceded an option for 12 more.

Senator NELSON. And then they set out to work the Government and said: "Here; we have got an option for 12 more ships with this Sloan Co. and we will give you this blessed option to the Government, if you will take all these ships at $100,000 more." Is that not the situation?

Senator RANSDELL. It was $105,000 more.

Senator NELSON. Yes; $105,000. Is that not the situation?

Mr. STERN. Senator Nelson, I can conjecture as well as you can; but I can not tell you anything about the facts at that time, because I do not know them.

Senator JONES. And you have nothing in your records to show whether this option that was alleged to have been taken on the 31st day of March was prepared afterwards or not?

Mr. STERN. Nothing at all. Except the Clinchfield letter of March 31, 1917, to Mr. Ferris, which speaks of the option. I will say this, Senator Jones, that in order to clear up this situation, it became important to know the terms of the option, because you gentlemen were interested in it. And in order to clear up that situation I telephoned on Saturday night to Mr. Crowell, the attorney for the Clinchfield company, asking him to bring that down here, and he came to-day without it. He told me that if I wanted it he would bring it down, but inasmuch as we were closing up the transaction with the Sloan com-

any, he seemed to think that he did not want—that he was not particular in having the Sloan company see that option. I think it was bona fide transaction. My own personal conjecture is that it was a bona fide transaction.

Senator JONES. Yes; but the date of it is important.

Senator NELSON. Yes; and the attorney says it is up there in New York.

Mr. STERN. Yes.

Senator NELSON (continuing). And Mr. Sloan testified before the committee the other day that it was in his office.

Mr. STERN. It is not at all improbable. They execute those contracts in duplicate and in triplicate.

Senator NELSON. But they both said they have the original.

Mr. STERN. Well, they could be duplicate originals, or triplicate originals.

Senator JONES. And Mr. Sloan says he gave this option on the 12th day of April.

Mr. STERN. I do not know whether Mr. Sloan is right about that or not.

Senator JONES. I do not either. He says he left New York on the 5th day of April, and that Mr. Ferris talked to him about this, and that he expected to be the representative of the Emergency Fleet Corporation——

Senator RANSDELL (interposing). Well, I am perhaps obtuse about this; but I want to know if any representative of the Emergency Fleet Corporation, or of the Shipping Board, was a party to that option, from the best information you can get, or was it simply an option between the Sloan people and the Clinchfield people?

Mr. STERN. From the best information I can get, I firmly believe this, that it was simply between the Sloan and the Clinchfield people, and I think, to that extent, it was a bona fide transaction.

Senator RANSDELL. I simply wanted to be clear about that in my mind.

Senator NELSON. What makes you think so? You think it was bona fide transaction, after you have had evidence of the working of the Government, do you—when the situation was so bad that they had to take possession of the yard?

(At this point there was an informal discussion, which the reporter was directed not to record.)

Senator JONES. I want this taken down, Mr. Chairman, and then if we decide to give it publicity we can do so.

Mr. STERN. But, Senator Jones, you were asking me for my own private opinion, and I was giving you my own private opinion.

Senator JONES. Well, the record will show that.

Mr. STERN. Well, I question whether I ought to be called upon to give my own private opinion about a matter of that kind.

Senator JONES. Well, if you do not want to give your private opinion, that is a different matter.

Mr. STERN. I am perfectly willing to state it here and certainly to you gentlemen.

Senator JONES. Well, we do not have to see it. [illegible] that, as a matter of precaution for yourself as well as in justice to Mr. Sloan, that you ought to give it.

Mr. STERN. So far as my own protection is concerned I am perfectly willing to state the facts, and I am perfectly willing to state my own private opinion if you want me to do so.

Senator NELSON. Well, you started out to give your opinion.

Mr. STERN. Yes; but I started out to give my opinion outside of the record, because after all it is only my private opinion. I am only construing the facts——

Senator RANSDELL (interposing). I do not think we ought to ask the witness to give a conjecture of this kind and put it in the record.

Senator NELSON. Well, he offered to give it.

Mr. STERN. I was asked to give it.

Senator JONES. Well, let it go in the record.

Senator MARTIN. If it is an opinion based on facts, and if he gives the facts along with his opinion, I do not see that any harm can be done by including that in the record.

Mr. STERN. Well, you see, opinions are a matter of personal equation. You size up a man, and form your conclusions based partly on that, just as a jury would do. Now, when you ask me to do that, you ask me to take a position similar to that of a jury, and if you insist I will do it; but I do not think it is fair.

Senator NELSON. Have you formed your opinion after conference with the attorney for the Clinchfield Navigation Co.?

Mr. STERN. No, sir; from seeing Mr. Sloan, Mr. Barnett, of the Clinchfield Co., and from going through the whole transaction.

Senator NELSON. I will call your attention to the fact that Mr. Sloan testified before this committee to something different from what this attorney for the Clinchfield Co. told you about that option contract.

Mr. STERN. Mr. Sloan gave it as his best recollection that the option was signed on the 12th day of April.

Senator NELSON. And that it provided for no price; that is what he stated expressly.

Mr. STERN. I think if you would get Mr. Sloan back here he probably would not be sure of that. However, Senator, the instrument is the best evidence of its contents; and we can get that down here from New York and have it here to-morrow.

The CHAIRMAN. I think that is the best thing to do.

Senator RANSDELL. Yes; you can get that for the committee.

Senator NELSON. Yes; we would like for you to get that.

Mr. STERN. All right, sir.

Senator NELSON. And then I would like to have testimony with it; I would like to have somebody swear as to the exact date when that instrument was signed—not the date which it bears on its face; but I want to have somebody swear when that contract was actually signed. Bring somebody here who can swear when that contract was actually signed.

Mr. STERN. May I make this suggestion, that Mr. Barnett, of the Clinchfield company, was the man who carried out these transactions, and he would know.

Senator NELSON. Yes.

The CHAIRMAN. Is he the man who negotiated the contracts?

Mr. STERN. He was the man who negotiated the contracts—every contract in this entire situation, so far as the Clinchfield people are concerned, was negotiated by Mr. Barnett.

ıator JONES. And of course he can tell us whom he negotiated in connection with the Shipping Board?

STERN. Absolutely.

ıator RANSDELL. Is he in the city?

STERN. He is in New York, but of course he would come down ıt a word from the committee.

ı CHAIRMAN. What is his relation to the Clinchfield company? ıe an officer in that company?

STERN. At all the times from the beginning of the negotiations arnett was the vice president of the Clinchfield Navigation Co., ill is the vice president of that company.

ator NELSON. And he carried on all these negotiations?

STERN. Yes, sir.

ator NELSON. And he was acting as the agent of the Sloan ration in making this contract? That is what Mr. Sloan testified.

STERN. Yes.

ator NELSON. Mr. Sloan did not see any of the Shipping Board. d not communicate with them; everything was done through ıntlemen you named——

STERN. Mr. Barnett.

ator NELSON. Yes; Mr. Barnett?

STERN. Yes, sir; that is true, so far as the records show.

ator NELSON. That is what the records show?

STERN. That is what our records show.

ı CHAIRMAN. What is Mr. Barnett's full name and address?

STERN. Charles M. Barnett, 24 Broad Street, New York City.

ator NELSON. Now, what more information can you give us the preliminaries before entering into the contract?

STERN. That Mr. Ferris wrote this letter of introduction, and ıpanying that letter was a letter, which is referred to in the of introduction, but was not printed in the record of this ıg,. I have it here, however, and I think you gentlemen might erested in it.

ıator NELSON. Is it a long letter?

STERN. Not very long.

ıator NELSON. Please read it and let us see. That letter accom- d the letter of introduction from Mr. Ferris?

STERN. Yes, sir. This is the letter. (Reading:)

CLINCHFIELD NAVIGATION COMPANY (INC.),
24 BROAD STREET.

ıator NELSON. What is the date of it?

STERN. April 23, 1917. This was two days before the letter roduction.

ator NELSON. Whom is it addressed to?

STERN (reading):

ORE E. FERRIS, Esq.,
30 Church Street, New York.

ı SIR: Confirming our conversation with you to-day, we hereby offer to turn e four motor ships and the four steamers which are now under construction ıt Olympia, Wash., by the Sloan Shipyards Corporation, pursuant to your also a contract from the same builder for the construction of 12 additional ı to be duplicates of the steamers now under construction for us. Delivery two ships in September, 1917, and last ship 15 months from date of contract, ce of $140 per dead-weight ton.

ator NELSON. Yes.

Mr. STERN (reading):

The contracts provide for 10 per cent on signing, and the balance in si payments during construction.

This offer is subject to acceptance not later than 12 o'clock noon, April 27,

Yours, very truly,

CHARLES M. BARNETT,
Vice Pres

Senator NELSON. Now, what do you say the $140 a dead-v ton amounted to, as to each of the ships?

Mr. STERN. As I remember it, it is $140 multiplied by which is $448,000.

Senator NELSON. Those ships are 3,200 dead-weight ton shi

Mr. STERN. Yes.

Senator JONES. That proposal seems to have been made t Ferris?

Mr. STERN. That proposal was made to Mr. Ferris.

Senator JONES. And it is proper to assume that he was senting somebody.

Mr. STERN. Well, excepting this, Senator Jones, that this letter was sent down by Mr. Ferris to Gen. Goethals, in the let April 25, which is printed in the record of these hearings, an referred to in that letter.

Senator JONES. Of course he was then in the employ of the gency Fleet Corporation?

Mr. STERN. He was then in the employ of the Emergency Corporation.

Senator RANSDELL. Did Mr. Ferris at that time know the Sloan company had contracted to build those four ships for $3 apiece?

Mr. STERN. Yes, sir.

Senator VARDAMAN. Where does the discrepancy come in between $490,000 and $448,000?

Mr. STERN. As I understand, Senator, that was to change vessels from the type they then were to the Ferris type vessel we were building.

Senator RANSDELL. And did that change involve legitimate increase of price from $448,000 to $490,000?

Mr. STERN. I can not answer that.

Senator JONES. Mr. Ferris testified that the change involv additional expenditure of from $25,000 to $30,000.

Senator NELSON. Does that contract say $140 a ton?

Mr. STERN. No.

Senator NELSON. What does it say?

Mr. STERN. $490,000.

Senator NELSON. How do you account for that—making tract at that higher price?

Mr. STERN. As I said before, Senator, I asked Mr. Sloan abou as to what accounted for the difference between $448,00 $490,000, and he said that it was due to the change from the that they then were to the Ferris type.

Senator NELSON. You do not understand my question. D the contract with the Government still call for a price of $490,0

Mr. STERN. $490,000, yes, sir.

Senator NELSON. Why was it, then, that the contract provid that price when in fact the price was much lower than that?

Mr. STERN. Oh, I see what you mean—because, as I understand it, the ships that were offered under this $140 dead-weight ton price were not of the Ferris type, and the ships that we closed for were of the Ferris type. But that is merely conjecture. I merely say what Mr. Sloan told me.

I am informed that the ships offered were 3,200 tons; the Ferris type is 3,500 tons: multiplied by $140 per ton that would make $490,000, the contract price.

Senator VARDAMAN. Did Mr. Ferris anywhere explain the items of cost that increased the price from $448,000 to $490,000? Did he explain that to anybody, and is it a matter of record?

Mr. STERN. I can find that out for you. I do not know.

Senator JONES. I will say this: Mr. Ferris testified here before this committee that to change those four steamers that the Sloans were building for $385,000 to the Ferris type ship that was contracted for by the Emergency Fleet Corporation would cost about $25,000—or, he said, a liberal estimate would be $30,000 apiece.

Senator VARDAMAN. Well, that would still be $12,000 short.

Senator JONES. Well, that would be the $105,000 difference between the two prices, less the $30,000 for the cost of the change in design. That would be the difference between the price of the contract that the Clinchfield Navigation Co. had with the Sloans and the price in the contract with the Emergency Fleet Corporation.

Senator NELSON. That was to lubricate the contracts.

Senator VARDAMAN. That was to hasten matters, probably.

Mr. STERN. I want to say this: I do not know anything about it, but I am told that Mr. Joseph Sloan said that he thought it would cost $50,000 and the Fleet Corporation thought it would cost $25,000 to make the changes. So they hit upon this figure.

The CHAIRMAN. What was the next step in the matter after this letter?

Mr. STERN. There was a telegram from Mr. Ferris to Gen. Goethals, dated May 2.

Senator NELSON. Read that, please. We have not got that in the record, I believe.

Senator JONES. Before you proceed to read that telegram, I want also to call attention to the fact that in the letter from the Clinchfield Navigation Co. to Mr. Ferris they suggested, I think, a 10 per cent payment every 30 days, when the contract, with the Emergency Fleet Corporation as finally made was for 11 per cent—

Mr. STERN (interposing). Twenty-two per cent.

Senator JONES. I mean 11 per cent every 30 days.

Mr. STERN. Yes, sir.

Senator JONES. I do not know whether the 1 per cent additional went to Mr. Ferris or not.

Mr. STERN. No—I beg your pardon.

Senator NELSON. Please read the telegram now. We have not that in the record. To whom was it addressed?

Mr. STERN. May 2, 1917. It was addressed to Gen. Goethals. (Reading:)

Referring to the 4 wooden ships, steam-propelling machinery, amidships, coal-burning, now under construction at Sloan Shipbuilding Corporation, Olympia, for the Clinchfield Navigation Co., and their offer to build 12 additional duplicate ships,

all of which are to my plans and specifications, and which you stated to me yesterday were acceptable, will I advise Clinchfield people to confer with Mr. Cotton regarding contract, and will you advise Mr. Cotton to this effect? Please wire instructions.

THEODORE E. FERRIS.

Senator NELSON. That is from Mr. Ferris?

Mr. STERN. That is from Mr. Ferris. And then a telegram from Gen. Goethals, dated May 3, which is immaterial, asking to hold it up for a little while.

On May 7 there is the letter which is printed in the record. That was specifically a letter of introduction, introducing Mr. Barnett.

Senator NELSON. That is the second letter?

Mr. STERN. That is the second letter; yes, sir.

Then, on May 16, there was a telegram from Gen. Goethals to Mr. Cotton. Shall I read this?

The CHAIRMAN. Yes.

Mr. STERN (reading):

CHARLES M. BARNETT, *Vice President:*

Clinchfield Navigation Co. has been instructed to call upon you to line up contract for 16 ships, to be built by the Sloan Shipbuilding Corporation, Seattle and Olympia, Wash., at $490,000 each.

GOETHALS.

Senator JONES. That is from——

Mr. STERN. Gen. Goethals.

Senator JONES. To whom?

Mr. STERN. Mr. Cotton. And then the next is a copy of a letter from Mr. Cotton to Gen. Goethals, dated May 18.

Senator JONES. Mr. Cotton was then in the employ of the Emergency Fleet Corporation as counsel?

Mr. STERN. I think so. I know that he represented Gen. Goethals, and I presume that he represented the Emergency Fleet Corporation.

Senator JOHNSON. I think the evidence shows that he was one of the attorneys in New York City at that time.

Senator NELSON. Yes; I think he was employed as an attorney by the Emergency Fleet Corporation.

Senator JONES. I knew he was at one time.

The CHAIRMAN. It would appear that Mr. Barnett had been down here and had taken the matter up with Gen. Goethals?

Mr. STERN. Yes, sir.

The CHAIRMAN. And Mr. Barnett and Gen. Goethals had reached a conclusion, and Gen. Goethals instructed Mr. Barnett to prepare the contract?

Mr. STERN. Yes, sir.

The CHAIRMAN. Now, will you please read the letter?

Mr. STERN. It is dated May 18. [Reading:]

MY DEAR GEN. GOETHALS: I inclose herewith three originals of the contract, in form for execution, bearing my O. K. for the Sloan Shipyards Corporation. The contract has already been executed by the vice president of the Sloan Co. When the original is executed by the United States Shipping Board Emergency Fleet Corporation, it will be called for by Mr. Barnett, of the Clinchfield Co., who is known to you and who negotiated the contract.

This contract is in the same form as the Merrill-Stevens contract, with two changes: One, the new labor clause; and two, a new pattern clause, which is in favor of the owner and against the contractor, to which the contractor has consented.

The only thing I have any doubt about in this contract is the initial payments, which are fairly large. I make these payments fairly favorable, because material men are demanding big advances. If I get too generous on these payments let me

ow. I think that up to date the contractors have been pretty well held down on ? early payments. The amounts are much lower than in commercial contracts.

Respectfully, yours,

——— ———.

?. S.—Mr. Barnett will bring Mr. Ferris's approved specifications.

Senator JONES. Would you infer from that that Mr. Cotton really termined the details of the terms of payment?

Mr. STERN. Very largely.

The CHAIRMAN. Except as to the lump sum?

Mr. STERN. Except as to the lump-sum price.

Senator JONES. Yes.

Mr. STERN. Now, that is all that there is in the files, except a rther reference that is in one of the files—a telegram from Mr. lain, our district officer in Seattle, who inquires whether a contract d been let to Sloan, and which indicates, of course, that Mr. Blain d not recommend the Sloan shipyards.

The CHAIRMAN. Now, Mr. Cotton says in his letter that this con-ct was signed by the Clinchfield Co., does he not?

Mr. STERN. No.

The CHAIRMAN. By Mr. Ferris?

Mr. STERN. That it was signed by the vice president of the Sloan ipyards Co. That was that man that Mr. Sloan testified about.

The CHAIRMAN. Not Mr. Barnett?

Mr. STERN. Not Mr. Barnett. It was signed by Mr. Richards, I ink.

Senator NELSON. Signed by him as the agent of Sloan?

Mr. STERN. Signed by Mr. Le Roy Richards, vice president of the oan Shipyards Co.

Senator NELSON. Signed by him as the agent of the Sloans?

Mr. STERN. Exactly.

Senator JONES. And he resided in New York?

Mr. STERN. Yes, sir.

The CHAIRMAN. Mr. Barnett negotiated it, but the contract was ade with the Sloan Co.?

Mr. STERN. Yes, sir.

The next thing that appears in the papers is the fact that the first ayment of eight hundred and some odd thousand dollars was paid t the end of 30 days, and was a matter of some newspaper noto-iety out in Seattle; and a newspaper clipping was sent to us from ut there.

Senator JONES. What did that show?

Mr. STERN. I have the newspaper here.

Senator JONES. It showed that Mr. Sloan had printed the check?

Mr. STERN. The check was printed. (Handing newspaper clipping o Senator Jones.)

Senator JONES. I never saw that before, but I have heard about it.

Senator NELSON. Had they done anything when they got that rst check? Had they done anything in the performance of their ontract, in any direction, when they got that first check?

Mr. STERN. May I say one thing before I answer that, so as to ad up to it?

Senator NELSON. Certainly.

Mr. STERN. This contract was drawn up rather loosely. It did ot contain the provisions which were contained in the later con-

tracts, putting strings upon the first payment. At that time it was customary to make first payments that were made merely after a certain time had elapsed. Later those payments—or, rather, the use of those payments—were restricted either to the construction of the vessels themselves or else a certain amount to the construction of the plant, or else they were put in a deposit account that was controlled by our signatures.

Senator NELSON. In other words, they contemplated that something should have been done under the contract before payment on it was made, while this contract did not provide for that?

Mr. STERN. This contract had no restrictions on that first payment.

Senator VARDAMAN. Had anything really been done in the construction of the ships?

Mr. STERN. I imagine not a great deal, Senator. It had this restriction—to be entirely accurate, it had the restriction that the payments would not be made except upon a sworn statement of moneys paid or obligations incurred. So that if you swore that you had incurred obligations to the extent of $872,000 and could show that you had done that, you would get your money. And that was what Mr. Sloan showed for his first payment. He showed that he had incurred obligations to the extent of eight hundred and seventy odd thousand dollars or more.

Senator NELSON. And that was then paid him?

Mr. STERN. And then the money was paid him. And on the second payment he showed that he had incurred further obligations in excess of $872,000.

Senator NELSON. And the second payment—was that in the same amount?

Mr. STERN. That was in the same amount, 11 per cent. And that was the great fault in that contract, that it had no restrictions upon either the payment or the use of the payment. The instant Admiral Capps came in he insisted that first payments should only be made that were equal to moneys paid out, or else to the values of materials actually on hand. And we cut out of the contracts all of that about "obligations incurred." They had to show actual money paid out or actual materials on hand, or else we would put it in a controlled account, which was subject to our countersignature.

Senator NELSON. As a matter of fact, they got nearly $1,700,000?

Mr. STERN. It was a little over $1,700,000.

Senator NELSON (continuing). Without showing that they had bought anything?

Mr. STERN. Showing that they had bought; yes—that they had contracted to buy.

Senator NELSON. I mean they did not have any material on hand?

Mr. STERN. Just a little. They had some; not a great deal.

Senator CALDER. Did the contractor have to show that he had contracted for material?

Mr. STERN. Yes, sir; not only a sworn statement, but it was checked up by the auditors. The auditor in this particular instance was loath to let the money go; but they were, under those plain terms of the contract, entitled to it; but the officers did the best they could; they checked up the statements.

Senator CALDER. Of course, there was no way for you to control payment of the money; he could put it all in his pocket?

Mr. STERN. Absolutely.

Senator CALDER. I know a case where a bank was in a similar ituation; and the man applied the payment to a previous obligaion to himself, that had been incurred years and years ago. And n this case he could do that with the first payment that the Shipping Board gave them.

Senator JONES. Do you know how many contracts were framed p in that way?

Mr. STERN. Just a few very early ones. I can get that informaion for you. I can say now that from the 11th day of August, and or some time previous to that—since Admiral Capps came in—no ontracts went out with that provision in them. There were some hat had already been signed, but Admiral Capps required them to be held up until it was consented that those first payments should be tied up in the way that he wanted them tied up.

Senator NELSON. That was not done in the case of the Hog Island contract, was it?

Mr. STERN. The Hog Island contract is an agency contract, and there is always a controlled account in those contracts, and as I remember, a bond for the proper application of the funds.

Senator JONES. If you can do so without very much trouble, I would like you to furnish the committee with the contracts that had that provision in them.

Mr. STERN. I will be very glad to do that.

The CHAIRMAN. Do you mean a list of those contracts?

Senator JONES. Yes.

Mr. STERN. Contracts without restrictions on the first payment?

Senator JONES. Yes; contracts similar to that of this Sloan Shipyards Corporation.

Mr. STERN. Yes.

Senator VARDAMAN. May I ask you this question? How many ships have been completed under this contract for the 16 ships?

Mr. STERN. None, sir.

Senator VARDAMAN. How many are in course of building?

Senator NELSON. None of them.

The CHAIRMAN. We went all through that, Senator Vardaman, and it is in the record; he described the yard and the condition of the ships and everything about it.

Senator VARDAMAN. Well, it was my misfortune that I was not present at the time.

The CHAIRMAN. Yes; I was just calling your attention to it, for that reason.

Senator JONES. Mr. Sloan has not even got those motor boats off?

Mr. STERN. I do not know. I just have a general impression of the conditions.

(At this point there was a further informal discussion which the reporter was directed not to record.

The CHAIRMAN. What was the next step?

Mr. STERN. In about September of 1917 complaints to us from our men of the bad progress at the plant, and those complaints may be grouped about as follows:

First, that the plant was being badly managed; that Mr. Sloan was a very bad executive; and that the progress that they [illegible] out there was not good.

Second, that Mr. Sloan was handling the situation like a promoter instead of like a shipbuilder. In other words, Mr. Sloan was going around promoting small concerns in order to make a saving on the lumber, and some of the other materials, and he was doing that with this money that had been advanced.

Senator NELSON. In the meantime he had built a yard at Aracortes?

Mr. STERN. In the meantime he was also using some of this money, and he built a yard at Aracortes; he also had partly financed a lumber concern; he also had partly financed an engine concern.

And when we learned of that situation and also of the fact that commissions or moneys were being paid to the Clinchfield company, that immediately set Admiral Capps to studying the situation and sending it down to his legal division; and the first thing we did was to send out a telegram to Mr. Sloan, asking him to come east for an explanation and giving directions to our district officers in the meantime to see that moneys were paid out only for labor and material that went into the construction of the vessels.

Mr. Sloan came on, and the situation was that disclosed was substantially as I have stated, that he was financing these small plants.

Senator NELSON. Out of this money that the Government had advanced him?

Mr. STERN. Either wholly or partially. That he had on his ways the four motor ships, and that he had to finish the four motor ships; and that, owing partly to the fact that a large part of the money for the motor ships was being paid to the Clinchfield company, Mr. Sloan did not have enough money to finish the motor ships, even with our liberal advance; he was using some of the money to finish the motor ships, which he also had a right to do under that contract.

Senator NELSON. Was your money applied to work on the motor ships?

Mr. STERN. Yes, sir.

Senator NELSON. You say he had a right under the contract to do that?

Mr. STERN. He had that right under the contract; there were no restrictions on the matter. I think it might have been arguable that the spirit of the contract was the other way, but from a legal standpoint, certainly, Mr. Sloan had no restrictions upon the use of that money.

Senator VARDAMAN. And that was 11 per cent of the entire contract price for 16 ships?

Mr. STERN. Twenty-two per cent.

Senator VARDAMAN. On the 16 ships?

Mr. STERN. On the 16 ships.

Senator NELSON. And he could even apply that money to the four motor ships that the Government had no interest in whatever?

Mr. STERN. Yes, sir.

Senator NELSON. Go on; this is very interesting.

Senator VARDAMAN. Yes—very.

Mr. STERN. We found then that it was necessary to do several things; one, to to get the motor ships out of the way. And another thing was to inquire into the relationship of the Clinchfield Co. and see why the Clinchfield Co. was receiving profits, when the Sloan Co. had not earned any profits. And that was the time when

we unearthed the Clinchfield Co. contracts, and we told Mr. Sloan that he was not to pay any more money to the Clinchfield Co.

Senator NELSON. Well, what was that Clinchfield contract that you mentioned?

Mr. STERN. These original contracts that I mentioned earlier in the day; that is, their contract for the four steamers and the 12 under option.

Senator NELSON. Yes; and then you found out——

Mr. STERN. I found out about those.

Senator NELSON. And you found out that you had been buncoed on the price?

Mr. STERN. We found out that we were paying $490,000, and that the Sloan Co. has agreed to sell them to the Clinchfield Co. for $385,000.

Senator VARDAMAN. May I ask you in that connection, when the Shipping Board discovered that fact, the men who are representing the Government in ordering these ships built, what did they say about that?

Mr. STERN. Well, we all felt very badly about it, of course. We felt that here was a situation in which the Government—some one was selling to the Government at a profit; and inasmuch as we all disapproved of profiteering, we thought it was a bad thing. I suppose, that, if the same vessels had been sold by the Clinchfield Co. to, say, the Standard Oil Co., it would have been a question of private profiteering; but because they were sold to the Government at a profit, we objected to it, and we especially objected to it because we did not know about it.

Senator VARDAMAN. You have no idea, however, that a deal of that kind could have been made with the Standard Oil Co.?

Mr. STERN. Yes, it could, because $490,000 was not a high price at that time.

Senator NELSON. Did you also discover the fact that Mr. Ferris was to have a commission out of it?

Mr. STERN. We certainly did not, sir.

Senator NELSON. You did not discover that he was to have a commission of 1 per cent on the 12 ships?

Mr. STERN. No, sir.

Senator NELSON. When did you first discover that?

Mr. STERN. I think that was Admiral Bowles's discovery; I think Admiral Bowles discovered that. After Mr. Ferris had testified up here, he asked Mr. Ferris a few questions; that is my understanding of it.

Senator NELSON. Yes. You may proceed.

Senator RANSDELL. If I understood you correctly, you said that was not an unusually high price. Do you mean that you were letting other contracts for ships of that same tonnage at that price at that time?

Mr. STERN. May I find that out for you? I would rather find that out and let you know later.

Senator RANSDELL. I should be glad if you will do so, because I want to see if we were really paying a higher price to those people than was being paid to other shipbuilders.

Mr. STERN. Yes, sir.

Senator VARDAMAN. I want to ask you in that connection, if that is not a high price for the ship, how could the Sloan Co. build that ship for $385,000? And even with the change that was made according to Mr. Ferris's direction, that would only add about $25,000 more; and if that is true, it does seem to me that $490,000 would be rather a steep price.

(At this point there was a further informal discussion which was not reported.)

The CHAIRMAN. I presume you could say, in a general way, in answer to that question, that what ships might be sold for in the market had very little relation to what they actually cost at that time?

Mr. STERN. That is true, Mr. Chairman.

And now the question of the motor ships becomes of some little importance at this precise moment. The motor ships were under construction for the Clinchfield Co. at $310,000 apiece. Those ships were sold to a man by the name of Calkins for $500,000 apiece, in June. I understand from Mr. Sloan that Mr. Calkins----

Senator NELSON (interposing). And they are still not completed?

Mr. STERN. They are still not completed. I understand from Mr. Sloan that Mr. Calkins was not buying them for himself; that he was buying them for somebody else.

Senator NELSON. Well, that was on the same basis as the other cases you were referring to—of the same style.

Mr. STERN. Exactly. There was a profit there of $190,000 per vessel. That profit was claimed by the Clinchfield Co., and you can see how that worked out. The Clinchfield Co. was to be paid that profit in installments as the progress payments for the work were made under the contract; as the progress payments of $62,500 apiece were made under the contract, the Clinchfield Co. got $21,000 or $23,000 out of each of those; in other words, they got more than a third of the progress payments. So you can see why Mr. Sloan did not have enough money to complete under the contract for the four motor ships.

Senator NELSON. Now, come back to the point that you left a moment ago; you sent for Mr. Sloan to come here?

Mr. STERN. Yes, sir.

Senator NELSON. And you found those discrepancies that you have referred to. What more did you find?

Mr. STERN. We found that the money had been spent in financing those concerns. We found that some of the money had gone to the Clinchfield Co., and we found that Mr. Sloan figured out that it would cost about $200,000 more than he was going to get under contracts for the motor ships to finish the four motor ships. Therefore, the thing that we wanted to do was, first, since it was charged that Mr. Sloan was a bad executive, for the Government to see that the yard was properly managed.

Second, inasmuch as the Clinchfield Co. was drawing this money from the Government, and thereby reducing the amount of funds that Mr. Sloan had available for the production of ships, we wanted to see that the Clinchfield Co. did not get any of that money, whether it was on the motor ships, or on any other ships, until our boats were finished.

And the third was, since Mr. Sloan expended this money like a promoter, instead of like a shipbuilder, that we would put that money in a controlled account; so that all moneys coming to the Sloan Co., no matter from what source, would be under that controlled account, so that they could only be spent with the visé of our auditors and inspectors.

Senator VARDAMAN. I suggest, Mr. Chairman, that we suspend this hearing until Senator Ransdell brings out what he desires in executive session; and after that, the things that are being discussed here now ought to be discussed in open session. I think the newspapers ought to have this information. It is a matter in which the public is vitally interested, and I should like to give the newspapers an opportunity to publish it as the witness details it.

Senator RANSDELL. There is no objection to that, on my part.

The CHAIRMAN. There is no objection to that.

(Thereupon the committee proceeded to the consideration of executive business, at the conclusion of which the following proceedings were had:)

Senator SHERMAN. I want to find out something for my own satisfaction. If Mr. Ferris had knowledge of those circumstances, do you not think he ought to have made it known to the Shipping Board that there was a difference of $105,000 in the price of each ship? Would that not have been fair, if he was serving the Shipping Board? I am not asking about any criminal aspect of it.

Mr. STERN. I should say, Senator, that if he thought it was betraying the interests of his clients to disclose information that he got as to the cost to his clients he should never have introduced his client——

Senator NELSON. You think it would have been better to betray the Government than to betray his client? Is that your idea?

Mr. STERN. You did not let me finish, Senator. I say, it seems to me he should either have stated that to the Government, or else he should not have introduced this corporation at all.

Senator SHERMAN. That indicates the danger of trying to take pay from two sources?

Mr. STERN. Yes.

Senator SHERMAN. And he had to abandon one or the other, as the case might be. If he had continued his relations with the Clinchfield Co., then the Government would have had to suffer in the price of the ships to the extent of $105,000. If he had disclosed to the Shipping Board the difference in the price the Shipping Board would probably not have made the contract at the price of $490,000, would it?

Mr. STERN. That is a matter of conjecture. I should say that very likely it would not.

Senator SHERMAN. At least the Shipping Board would, in fairness, have been entitled to that information, would it not?

Mr. STERN. It seems so to me, Senator.

Senator SHERMAN. Do you know who the stockholders of the Clinchfield Navigation Co. are?

Mr. STERN. I do not, sir.

Senator SHERMAN. Can you ascertain?

Mr. STERN. Certainly; we can get them.

Senator SHERMAN. I would like to know their names, where they live, and how many shares of stock they have in that company.

Mr. STERN. I think you can probably get that from Mr. Barnett.

Senator SHERMAN. I would like to know how the Government happened to enter into this $490,000 contract without discovering this. This Sloan Shipbuilding Co. was a well known concern. Of course there were contracts sold on the market; these options were carried around and sold to the highest bidder and the Government happened to be one of them. That was a common thing in private shipbuilding before the Government took over these contracts and ships by commandeering them. But what I want to get at is how the Government happened to be influenced to enter into this contract, and who the stockholders were in the Clinchfield Co.

Mr. STERN. There are three men that might be able to give you that information, Senator.

Senator SHERMAN. You can get it later, can you?

Mr. STERN. Yes, sir.

Senator SHERMAN. Let me ask you another question. Do you know who the stockholders are in the United States Shipbuilding Co. at San Diego, Cal?

Mr. STERN. No, sir.

Senator SHERMAN. Can you get that information?

Mr. STERN. I think we could, sir.

Senator SHERMAN. Can you furnish a contract entered into between that company and the Shipping Board?

Mr. STERN. Oh, yes.

Senator SHERMAN. I would like to see that.

Mr. STERN. I think you have it right here.

Senator SHERMAN. I would like to have the names of the stockholders in that company.

Senator JONES. The clerk says we have not got that contract, because it has just been signed.

Senator SHERMAN. I was told that nearly three weeks ago; by this time it ought to be accessible. I would like to know if there was anyone connected with the San Diego Shipbuilding Co. by the name of Sullivan--Mr. Sullivan, of Chicago. I do not know his first name. There are a great many Sullivans there; it is not Roger C. Sullivan; do not confound the two.

Mr. STERN. We will request that information for you, sir.

Senator VARDAMAN. Mr. Chairman, is it understood that this testimony that has been taken down is all open for the inspection of the newspapers?

The CHAIRMAN. Oh, yes.

Senator NELSON. And that it goes into the record.

Mr. SHERMAN. Will you find out whether Adam Weckler has any connection with this same company? He was the harbormaster in Chicago under the present city administration.

Mr. STERN. Yes, sir.

Senator VARDAMAN. Just go ahead, Mr. Stern, from where you left off.

Mr. STERN. I think we left off at about the point where Mr. Sloan came on to Washington. Mr. Sloan came to Washington, and he was accompanied by Mr. Barnett of the Clinchfield Co. As I say, we discovered that those three points needed protection.

Senator NELSON. What three points?

Mr. STERN. First, that Mr. Sloan was spending the money as a promoter, so we tied all the money up in a deposit account. Second, that some of the money was going to the Clinchfield Co. before any profits were earned, so that, with the consent of the Clinchfield, we had them subordinate their right to receive any money until all our vessels were completed. That applied not only to the moneys that came under our contract but to the proportion that they received of the moneys coming in under the contract for the four motor ships. Third, Mr. Sloan, from all accounts——

Senator NELSON. May I ask a question right there, if it is convenient? How much had they got from the Government money on the motor ships: how much had the Clinchfield Co. got of the Government money on the motor ships?

Mr. STERN. They got nothing from the Government on the motor ships.

Senator NELSON. I mean through Mr. Sloan: through this money that Mr. Sloan had got from the Government.

Mr. STERN. I could only say there what Mr. Sloan has told me, that they got about $163,000 in commissions from the Government, and that the rest of the money, amounting to some $200,000, I believe, was paid back to the Clinchfield Co. for advances that they had made to Mr. Sloan, which was actually represented in materials purchased.

The third point was that Mr. Sloan, according to all reports that we had, had proved a very bad executive and a man who was not running the shipyards well. As a result, we had them agree to this provision, that the yard was to be run by people who were appointed by the Sloan Co. and approved by us: that all the employees of the Sloan Shipyard Co. and of the Anacortes plant, and of that other plant that they controlled, the Capital City Iron Works, were to be subject to our approval, and that the scope of their duties was likewise to be subject to our approval: but that Mr. Sloan was to resign from the active management and was to be retained only for such duties as we might ask him to undertake.

Senator NELSON. At a salary of $10,000?

Mr. STERN. At a salary of $10,000 a year.

Senator NELSON. He had been getting $25,000 before that?

Mr. STERN. He had been getting $25,000: yes, sir.

Senator NELSON. It amounted, then, to a taking over of these companies, these yards, by the Fleet Corporation, did it not? That is, the work is carried on practically under the auspices of the Government?

Mr. STERN. Yes: but there was this arrangement, Senator, that we incurred none of the legal obligations by taking it over: that actually all we did was to get sufficient supervision so that if these gentlemen proved that, through their own agents, they could run the yard satisfactorily we could leave it to them. In other words, it was not to our interest to run a yard if we did not have to, and as soon as we could cut out all of the bad practices that existed there they could have their yard back. In the meantime we had control of the expenditure of the money and all of the shipbuilding and we could see that there was no bad practice indulged in out there.

Senator NELSON. Do you remember the name of the man you put in charge of the yard at Olympia?

Mr. STERN. Mr. McAllister.

Senator NELSON. Mr. Sloan testified that Mr. McAllister would not let him have anything to do with it; that he excluded him. That was one of his grievances here before the committee.

Mr. STERN. Yes, Senator; I know that was one of his grievances. Mr. McAllister was the man who had been employed by Mr. Sloan; he was named by Mr. Sloan, and Mr. McAllister was accepted by our district officer after having been named by Mr. Sloan. There was then some talk between Mr. Sloan and Capt. Blain, who is our district officer this I have from hearsay—as to Mr. Sloan's interference in the yard, and an arrangement reached which Capt. Blain understood was satisfactory to Mr. Sloan. Mr. Sloan wired us that he and Capt. Blain had had a very satisfactory meeting and he thought things would go along very well. The first we learned that there was any friction was when Mr. Sloan said he was excluded from the yard, and as soon as we learned of that Admiral Bowles immediately sent out word that Mr. Sloan was entitled to full access to the yard at all times and to the inspection of all books and records. And so that grievance was corrected. The situation was all right; it may be there was some lack of tact out there.

Senator NELSON. Then you have a modified contract, and you have provided that the force that operates these two yards and that steel plant shall be men that meet with the approval of the Emergency Fleet Corporation?

Mr. STERN. That was one of the changes; yes, sir.

The CHAIRMAN. Have they agreed to that now? Mr. Sloan said that he had never signed this modified agreement.

Mr. STERN. May I state the situation as to that? Mr. Sloan signed an agreement which contained the things that he subsequently objected to, and then he went home. He went home with the understanding that Mr. Haight, his New York attorney, should have authority to arrange some details that were not quite agreed upon between the Clinchfield Co. and himself. Mr. Haight approved the contract, and then it went out to Mr. Sloan. Mr. Sloan then made objections that were objections against the one that he had signed and not the subsequent one, and now Mr. Sloan has come here with his lawyer, and they were to meet me this afternoon. They are in thorough accord with the Government, and they are quite ready to sign the contract, the second form of contract, except that they have asked for one or two slight concessions, which do not affect the general situation.

Senator NELSON. Can you give us an outline of this contract?

Mr. STERN. Yes, Senator. It is printed in the record.

Senator NELSON. Just state briefly what the main features of it are.

Mr. STERN. The main features are, first, that all of the moneys that may come to the Sloan Shipyards Co. are put in a controlled account, and may be used only for labor and materials in the construction of the vessels, or as necessary in the construction of plant, when the vouchers have been approved by our representatives and the checks have been countersigned by our representatives. Second, that all moneys that come into the Sloan Shipyards, or that all moneys that are had under the contracts for the four motor ships, are like-

wise to be put into this deposit account and checked out only in that way, so that we have full supervision not only of our own moneys but of all moneys that are used for the four motor ships. Third, that we have complete supervision over the overhead expenses and a right to veto the appointment of any employee at those yards, and the further right to determine what duties the employees shall be assigned to. Fourth, to secure us in the repayment of the moneys that have been expended for purposes other than our purposes, for moneys that have not gone into the construction of ships, a mortgage is to be executed covering the three plants and also covering the bonds of some lumber company that they have financed, and the bonds under that mortgage are to be held by us.

Senator NELSON. That mortgage is for $750,000?

Mr. STERN. Yes, sir.

Senator NELSON. That is to secure the Government?

Mr. STERN. That is to secure the Government.

Senator NELSON. For money that has been squandered?

Mr. STERN. Yes, sir. Now, after we are paid, after the Government is paid, then the Sloan Shipyards Co. and the Clinchfield Navigation Co. have an arrangement between themselves under this contract. The Clinchfield Co. has the right to be paid first for its own claims against the Sloan Co. ——

Senator NELSON. Out of the surplus?

Mr. STERN. Only after we are paid.

Senator NELSON. That is what I mean. Only after you are paid and have got your ships?

Mr. STERN. Only after we are paid and have got our ships. Then the Clinchfield Co. is to be paid, and if there is any disagreement there is some provision for the United States paying the money that the Sloan Co. claims belongs to it into some trust company or other depositary, subject to the adjudication of what belongs to Clinchfield and what belongs to Sloan. Then as to the 1 per cent that I mentioned, we are going to arrange in a supplemental agreement that that 1 per cent will be deposited in a depositary until it is determined to whom that 1 per cent belongs.

Senator NELSON. But in doing that you simply leave an opening for Mr. Ferris to get a slice out of that 1 per cent?

Mr. STERN. No, sir. I should have said that that 1 per cent is to be put into a trust company and be litigated for or decided upon between the Sloan Shipyards, the Clinchfield Co., and ourselves.

Senator NELSON. Mr. Ferris was to have the 1 per cent, was he not?

Mr. STERN. He was to get 1 per cent: yes, sir.

Senator NELSON. He was to get 1 per cent: that is what the 1 per cent referred to is?

Mr. STERN. But we are not considering that point in the contract we are drawing.

Senator NELSON. Then you leave that open, so that Mr. Ferris can come in and claim that out of this fund that you set aside. You set aside the fund of 1 per cent, and then Mr. Ferris can come in afterwards and claim it?

Mr. STERN. No, sir: that particular fund is merely deposited——

Senator NELSON. You deposit it in escrow, do you not?

Mr. STERN. For the interests of three people.

Senator NELSON. And those are the Clinchfield Co., the Sloan Co., and Ferris?

Mr. STERN. No, Senator.

Senator NELSON. They are the only people that have an interest in it.

Mr. STERN. The Sloan Co., the Clinchfield Co., and the Emergency Fleet Corporation.

Senator NELSON. The Emergency Fleet Corporation has no interest in it?

Mr. STERN. I think it is conceivable that the Emergency Fleet Corporation has an interest in it.

Senator NELSON. Can you not see that Mr. Ferris has the main interest? That commission was to go to him.

Mr. STERN. Well, Senator, you asked me about the terms of the contract, and I have tried to give them to you.

Senator JOHNSON. Do you know whether any statement of this particular transaction has ever been issued by the Shipping Board or any of its officers?

Mr. STERN. As to the Sloan transactions?

Senator JOHNSON. As to Mr. Ferris's connection with it?

Mr. STERN. I do not know that any statement has been issued. I have seen statements in the newspapers.

Senator JOHNSON. That is the reason of my inquiry.

Mr. STERN. I do not know that any formal statement has been issued.

Senator NELSON. When you made this new adjustment, did you not know that this 1 per cent was a commission intended for Mr. Ferris?

Mr. STERN. Yes, Senator; but, as I say, we conceive that the facts may show that the Emergency Fleet Corporation is entitled to that money, and so we are going to hold it up to retain our interest in it.

Senator VARDAMAN. If that contract with Mr. Ferris has been made in violation of law or in violation of that contract that was made with him by the Government, then the Shipping Board does not concede that Mr. Ferris has any interest in the 1 per cent, does it?

Mr. STERN. Well, I merely go so far as to say this, Senator, that if it should turn out to be the case that this commission was made by Mr. Ferris without the consent of the Emergency Fleet Corporation, the Emergency Fleet Corporation might well have the right to claim that it was entitled to that, because an agent is not entitled to benefit at the expense of his principal, and it is an elementary leagal principle that the principal is entitled to any private profit that the agent may make.

Senator VARDAMAN. Have the representatives discussed that question? Have you heard any expressions from the men responsible for this as to whether or not they would concede that Mr. Ferris has a right to the 1 per cent?

Mr. STERN. The question has not been decided, Senator; we have discussed it. We have tried to assemble the facts, and inasmuch as we are not in possession of all the facts we thought it best to conserve the Government's interest by having those moneys placed where we can exercise any rights we have over them.

Senator VARDAMAN. As a representative of the American people I sincerely hope that the Shipping Board, who made this contract, will not permit him to take that money, because he has no right to it.

The CHAIRMAN. Do you know whether Mr. Sloan, of the Anacortes Co., is to be retained there by the company to look after that work?

Mr. STERN. I think it is the intention of the Fleet Corporation that he shall be. I can say this, Senator Fletcher, that the instant we heard that Mr. Joseph Sloan had been asked for his resignation, Admiral Bowles immediately wrote out there asking why Mr. Joseph Sloan had been removed, and I think the response was an attempt to put Mr. Joseph Sloan back. I think it is also true that the supervision of that yard has been transferred from Capt. Blain to a Mr. Pigott.

Senator NELSON. That is, the Anacortes yard?

Mr. STERN. The whole business; yes, sir.

Senator JONES. That is, all the wooden-ship construction out there has been transferred to him?

Mr. STERN. All the wooden-ship construction out there. And Mr. Sloan has expressed a belief that he would be able to cooperate thoroughly with Mr. Pigott.

Senator JONES. You mean the Anacortes Sloan?

Mr. STERN. Both Sloans.

There is one other feature in this transaction. The Anacortes yard objected to giving a mortgage that would protect not only the loan that had been made to the Anacortes Co., but would secure the performance of the entire contract. We, on the other hand, insisted on having the Anacortes yard behind the entire contract, for the reason that we claimed there was no right in the first place to assign the contract to Anacortes. We gave a contract for 16 ships to the Sloan shipyards and they had no right to assign it to anybody else, and we said the only condition we would hear of would be a condition that we were just as well protected at Anacortes as we were at the Sloan shipyards.

Senator NELSON. Some of the Government money had been diverted to the Anacortes yard?

Mr. STERN. Exactly. So we insisted on the Anacortes yard being behind that contract. I understand that some of the stock of that yard is not owned by the Sloan Shipyards and that some of the people out at Anacortes fear that if this mortgage is given and there is a deficiency there they will lose their capital investment. Accordingly the proposition was made to us that we should permit some of these moneys to be used for the purpose of acquiring the outstanding preferred stock and turn that in under the mortgage.

Senator NELSON. My recollection is that something over $300,000 was diverted to that Anacortes yard.

Mr. STERN. Quite a considerable sum, sir. We are going to insist, of course, that we get a mortgage to cover our interest from the Anacortes yard.

Senator NELSON. The $750,000 mortgage will cover both plants?

Mr. STERN. It will cover all three plants, and that agreement will be signed. I think that covers the transaction up to date.

Senator NELSON. Have you any data here about the Hog Island contract?

Mr. STERN. No, sir.

Senator NELSON. You are not familiar with that transaction?

Mr. STERN. The three fabricated ships contracts I have not worked on except incidentally. I took care of a great many of the

other contracts but I had substantially nothing to do with the three fabricated ship contracts whatever.

Senator NELSON. What are the three?

Mr. STERN. The Submarine Boat Co., the American International, and the Merchants' Shipbuilding Co.

Senator NELSON. They are all on the Delaware, are they not?

Mr. STERN. No, sir; the Submarine Boat Co. is at Newark. One of the others is at Bristol, I believe, and the other at Hog Island.

Senator CALDER. Mr. Stern, do you know anything about the facts concerning the ships being constructed by the Sun Shipbuilding Co. on the Delaware River. These are contracts with different parties that have been taken over by the Government. You do not know anything about that?

Mr. STERN. I do not, sir.

The CHAIRMAN. I believe it has not appeared in the record yet, but do you know, as a matter of fact, that Mr. Ferris tendered his resignation and it was accepted?

Mr. STERN. I so understand it, sir.

Senator NELSON. Senator Jones called attention to the fact that he had been getting commendatory letters since he had resigned. Do you know anything about that?

Senator JONES. Not commendatory letters, Senator, but there were interviews that purported to have been given to the papers by Mr. Hurley and Mr. Piez, rather giving him a fair certificate.

Mr. STERN. I was not present at any of the interviews, and I do not know what the substance of the interviews was.

The CHAIRMAN. Is there any other matter, Mr. Stern, that you think we ought to go into?

Mr. STERN. No, sir. I just wanted to make it plain that in the contract that Mr. Sloan said he refused to sign but was perfectly willing to sign there were just a few little points that he objected to. Naturally he objects to our exercising supervision, but it was never a question of our not exercising supervision it was a question of whether we should take over the plant or let them continue under our supervision——

Senator NELSON. You had a right under the contract to take it over?

Mr. STERN. We had a right to take it over if the progress was unsatisfactory. We preferred to give them a chance to work it out, and that was the arrangement we adopted.

The CHAIRMAN. And you were only operating for his account, as it were?

Mr. STERN. We have been operating for his account. He still has the right to name the men. His old employees are kept there, we merely exercise a veto power on those men, and if they are in the wrong positions we have the right to shift them to the right positions. Mr. Sloan, if he objects to the management, has the right to arbitrate almost any question under this contract.

Senator NELSON. What about material? Do you exercise a veto on the purchase of material?

Mr. STERN. All commitments; yes, sir.

Senator NELSON. The same as labor?

Mr. STERN. The same as labor.

Senator JONES. In this new contract is there any new arrangement de with reference to his salary?

Mr. STERN. No; that stays at $10,000.

The CHAIRMAN. That is paid by the Sloan shipyards?

Mr. STERN. By the Sloan shipyards.

The CHAIRMAN. Now, Mr. Stern, Mr. Piez sent us down an answer to our request for a statement showing the previous salaries or compensation of employees now receiving $200 per month and over, as shown on the list dated December 22, 1917, for the American International Shipbuilding Co. The statement gives a list of previous salaries, but it does not give the present salaries. Of course we can get that by referring to the record, but I wonder if you could not take this statement back so that we will have it in convenient shape.

Mr. STERN. A comparative statement?

Senator NELSON. Yes; have one column of what you are paying now, so that we can see it. This list gives the previous salary, but it does not cover what you are paying now.

Senator JOHNSON. You will find that in the record. The old pay roll appears at page 245. There are only slight increases, $500 a month and the like; little things like that.

The CHAIRMAN. Senator Johnson, did you ask Admiral Bowles that he furnish a list of those who were rendering service without compensation?

Senator JOHNSON. No; I did not ask him, but Admiral Bowles on one occasion here did furnish a letter from these gentlemen in which the names of those who were rendering service without compensation were set forth. There are a half dozen names to conjure with in that particular connection. That has been furnished, Mr. Chairman, and is here, some place.

The CHAIRMAN. It is not in the record?

Senator JOHNSON. It may be; I have not been able to find it, however.

Do you know the gentleman named Robinson—I find that there are two Robinsons, one connected with the Submarine Boat Co.——

Mr. STERN. One connected with the Merchants Shipbuilding Co. and one with the International.

Senator JOHNSON. That is it. Are they related?

Mr. STERN. I could not tell you that, Senator.

Senator CALDER. Mr. Chairman, there is some information I would like to have Mr. Stern furnish if he can, please. I think he can. I should like to know the number of ships being constructed by the Sun Shipbuilding Co. that have been commandeered by the Shipping Board, with the price they were being constructed for under private contracts, and the names of the men for whom they were being constructed, and the price the Shipping Board is taking them over at.

The CHAIRMAN. We would be glad if you could furnish that, Mr. Stern.

Mr. STERN. We can furnish it; yes.

Senator VARDAMAN. Mr. Chairman, you have not received the information that was asked for yesterday regarding the expenditure by Mr. Ferris, have you, and what was paid to him?

The CHAIRMAN. No; that has not come in yet.

Senator NELSON. Do you know, Mr. Stern, who carried on the negotiations for this Hog Island contract? Was that under Admiral Capps's administration?

Mr. STERN. It started in Gen. Goethals's administration, I believe, and was continued during Admiral Capps's time. I believe it was carried on under Admiral Capps, and Admiral Capps and Mr. Bulkley and a Mr. Saeger would be familiar with that. Mr. Bulkley and Mr. Saeger are both attorneys in the War Industries Board.

Senator NELSON. They are not with you now?

Mr. STERN. No, sir.

Senator NELSON. They carried on the negotiations?

Mr. STERN. Yes, sir.

Senator NELSON. On behalf of the Government?

Mr. STERN. On behalf of the Government; though I understand Admiral Capps took a considerable part in the negotiations.

Senator NELSON. Who were the men on the other side who opened the negotiations?

Mr. STERN. For the contractors?

Senator NELSON. Yes.

Mr. STERN. I am not sure that I can give you that accurately, Senator. I know some of them. With the Submarine Boat Corporation, the negotiations were carried on by a Mr. Stroock; he is of the firm of Stroock & Stroock, of New York City.

Senator NELSON. Architects?

Mr. STERN. Lawyers. The American International Corporation was, I believe, represented by Mr. Begg, of the New York firm of Byrne & Cutcheon.

Senator VARDAMAN. Were they lawyers, too?

Mr. STERN. They were lawyers, too. Then the Merchants Shipbuilding Corporation was represented, as I remember, by the firm of McKinstry, Taylor & Patterson. I am not sure that that is the exact name.

Senator CALDER. Mr. Bulkley represented the Government?

Mr. STERN. The Emergency Fleet Corporation.

Senator CALDER. Is he connected with your office?

Mr. STERN. No. You see, Senator, Gen. Goethals's legal staff had resigned at that time and went to work for the War Industries Board and Mr. Hurley knew Mr. Bulkley and I assume that he recommended Mr. Bulkley to Admiral Capps, and we all came over immediately at Admiral Capps's request, because at that time there was not very much work for the War Industries Board, and we helped out Admiral Capps until we got some other men in and Mr. Bulkley gradually worked up an organization, and then we went back to the War Industries Board.

Senator JONES. Did Mr. Bulkley know about this before Admiral Capps came in?

Mr. STERN. No.

Senator JONES. It was prepared and ready for signature when Admiral Capps came in, was it not?

Mr. STERN. As I understand it, Senator, Admiral Capps had a great many other important changes embodied in it.

Senator JONES. I know, but was it not prepared for his signature when he came in?

Mr. STERN. I could not tell you, sir.

Senator JONES. I have here a letter from the secretary of the Central Labor Council, of Seattle, inclosing a copy of a petition relating to the matter of conscription of labor, which was brought up in this committee. They refer to that fact, and I think that in justice to

them this letter and this resolution should be made a part of our record.

The CHAIRMAN. If there is no objection, that will be done.

(The letter and resolution referred to are here printed in full as follows:)

CENTRAL LABOR COUNCIL, OF SEATTLE AND VICINITY,
AFFILIATED WITH AMERICAN FEDERATION OF LABOR.

Seattle, Wash., January 21, 1918.

Hon. WESLEY L. JONES,
United States Senate, Washington, D. C.

DEAR SIR: Inclosed you will please find resolution adopted by the Central Labor Council at its last regular meeting, bearing upon the subject of conscription of labor.

For our soldiery conscription and efficiency may go hand in hand, but certainly not with regard to the labor so vitally necessary for the construction of ships and munitions. Efficiency can only be brought about by the greatest possible measure of freedom being enjoyed by the workers. The cases of the soldier and the mechanic are exactly the opposite, what makes for efficiency in one, directly would bring about inefficiency and ruin if applied to the other.

We have reports in our daily papers that commissions are leaving the East to visit Seattle for the purpose of investigating the methods by which the greatest degree of efficiency was established in our shipyard plants of any in the United States. Investigators might just as well save the time and money and stay at home, as the price of a postage stamp will communicate the information that organization among the workers is responsible for the efficiency in the Seattle shipyards. Give the men in the East a share of responsibility, just working conditions and an organization in which each man knows the other as brother, and teamwork and efficiency will follow. All talk of labor conscription is the most utter rot in this hour when the cry of the Nation is for efficiency.

Feeling assured that there is no need for alarm over this matter with sane men at the helm, and believing you will be, as we are, unalterably opposed to any such venture, as the newspapers seem to take seriously, I am,

Yours, very respectfully,

[SEAL.] JAMES A. DUNCAN,
Secretary.

To the officers and members of Hope Lodge, No. 79, greeting:

Whereas through the press we are informed that labor will be conscripted to push the work of shipbuilding and other work requisite to the efficient conducting of the war: and

Whereas an agreement is already in effect between the United States Government and the American Federation of Labor providing necessary machinery for securing efficient labor for war emergency service: and

Whereas in the first two days of the operation of the United States employment office in the city of Seattle, approximately 5,000 jobless men who are eager to work are registered and many thousands turned away: and

Whereas the members of Hope Lodge, No. 79, International Association of Machinists, believes that labor has demonstrated that it needs no compulsion, as witness the large number of ships that are being launched from the ship yards of Seattle in record time, as well as other work necessary to the furtherance of the war, large numbers of men being employed on this work covering in many cases the 24 hours of the day, while men are to be seen seeking employment at the different ship yards in large numbers. This speaks for itself. The function of labor is production and its hands have ever been held out to perform this function. Any deviation from this has been brought about by manipulators and speculators, seeking to rob labor, which produces all, of its just reward: Therefore be it

Resolved, That we, the members of Hope Lodge, No. 79, strongly protest against the conscription of labor as being unnecessary and unconstitutional and opposed to the cardinal principles of the Government of the United States as it will thwart the end in view by taking away the initiative of the worker by robbing work of its expression. Labor must be free and unfettered, the more so when wealth is not conscripted; and be it further

Resolved, That these resolutions be submitted to the Central Labor Council and Metal Trades Council for indorsement and copies sent to our Senator and Congressmen and to the President of the United States.

Indorsed by Metal Trades Council January 8, 1918. BERT SWAIN, *Secretary.*

Indorsed by Central Labor Council of Seattle and vicinity January 16, 1918.
JAMES A. DUNCAN, *Secretary*

Senator JONES. I also have an extract from a letter that I also want to put into the record, which I hope Mr. Browne, of the purchasing department, will examine. I call it to his attention. It is a letter from the Nisqually-Russell Car & Locomotive Works, Tacoma, Wash. They say:

We have been endeavoring to secure the drawings and blue prints and specifications for the ship davits railing stanchions engine-room ventilators mushroom ventilators, lifeboats and life rafts for several months and have made many personal calls at the offices of the Emergency Fleet Corporation in Seattle for this purpose. and we are advised that these drawings and specifications are expected daily from Washington but have not yet been received. Meanwhile many hulls are nearing completion and there is every probability that several ships will be ready to launch in the near future without being complete. for the reason that the various yards can not get information regarding these various parts.

I think that is a matter which should have the very careful consideration of the Shipping Board. It suggests that the plan followed by Mr. Browne and the corporation of simply sending out letters to those that they know with reference to matters of this kind is not a plan that gets the widest publicity and brings what they need to the attention of the people who are prepared to make proposals. I want to put that in the record, and as I say, I call it to the attention of those people.

Senator JOHNSON. I would like to make one inquiry. I observe that the American International contract, concerning which Mr. Piez has made a report very recently, is countersigned by F. A. Vanderlip. I suppose that is the gentleman connected with the National City Bank, is it not?

Mr. STERN. I assume so, sir. Those are the initials.

Senator JOHNSON. I also observe that the contract with the Merchants Shipbuilding Corporation is countersigned by W. A. Harriman. Is that the gentleman connected with the Harriman financial interests and the Harriman Bank?

Mr. STERN. I rather think so; that is my impression.

Senator JOHNSON. Is there any means by which we can determine the relationship existing between these corporations that have entered into these contracts, or the relations between interlocking corporations that are the basis of the corporations which have made the contracts with the Government?

Mr. STERN. I think they will certainly answer any questions that we put up to them, and if we merely ask for a list of stockholders I feel sure we will get it.

Senator JOHNSON. Do you know personally anything about the interlocking corporations that form the basis of any of these contracts?

Mr. STERN. I do not, sir; except what was just general talk in New York at the time the American International was started. I mean that everybody throughout the country generally knew with what concerns the American International was connected. It was just a matter of common talk, and printed in the newspapers.

Senator JOHNSON. What concerns were those?

Mr. STERN. As I remember, Stone and Webster were connected with it, and the National City Bank, and a whole string of concerns.

Senator JOHNSON. The concerns reached to the Steel Corporation as well?

Mr. STERN. I could not say, Senator.

Senator JOHNSON. Was that the general understanding?

Mr. STERN. I rather think that is true; I am not sure. I just have a general impression of that now; it is some time ago.

Senator JOHNSON. Take the Harriman contract. Did that reach into the same basic corporations as well?

Mr. STERN. I do not know.

Senator JOHNSON. Was that generally conceded to be the fact?

Mr. STERN. Not to my knowledge.

Senator JOHNSON. Could you tell me any way in which the direct information could be obtained?

Mr. STERN. I should think so, sir. I should think they would very gladly furnish a list of stockholders if we asked them for it.

Senator JOHNSON. But that would not give me the information. You see, we obtained from Admiral Bowles a statement from Moody's Manual concerning the American International, but the mere names of the stockholders perhaps would not afford the connection we desired. Is there anybody connected with the Shipping Board who is familiar with these interlocking financial corporations?

Mr. STERN. I can inquire about that for you, Senator.

Senator JOHNSON. Thank you. I wish you would. There is nothing that need take you from your way in the matter at all.

Senator JONES. Mr. Chairman, I had a resolution prepared to offer to the committee, and I think I shall offer it to-day. Mr. Robinson made on Saturday a very interesting statement with regard to this matter of concrete ships. I am willing to let the Emergency Fleet Corporation know that if they want to consider these propositions and even to spend some of the money of the Fleet Corporation in testing them, I would not criticise them for doing so. So I am going to propose this resolution to the committee:

Resolved. That it is the belief of the Committee on Commerce that the suggestions submitted to the committee by Mr. Robinson concerning the building of concrete ships have much merit, and we recommend their prompt consideration by the United States Emergency Fleet Corporation. We believe that a body composed of concrete, naval, and maritime engineers of high standing should be called to Washington and asked and directed to consider and pass upon the feasibility of concrete over-sea ship construction, and if the same is deemed feasible to prepare and recommend the design of a ship best adapted to serve the immediate war needs and if such a design is prepared and recommended we believe the United States Emergency Fleet Corporation should proceed immediately to the construction of such ships in the most expeditious manner, either through private or public agencies, at the same time taking steps to provide for the equipment of the same, all to be done without hindering or delaying the expeditious construction of steel and wooden ships.

Senator VARDAMAN. Mr. Chairman, there may be a great deal of merit in it, but my lack of information on the subject is so very great, my ignorance is so profound, that I ask to be excused from voting on it.

Senator NELSON. I do not believe, Mr. Chairman, that we ought to go into these experiments at this time. The Shipping Board has a big shipbuilding program which they ought to go on with as expeditiously as possible, and to go off on a tangent on something that is in an experimental stage at this time seems to me to be utterly out of place.

Senator VARDAMAN. I think it would be well to let this resolution rest for a few days anyway. If we knew it would accomplish what this man stated, of course, we would all favor it, but I am not in a state of mind to vote on it this afternoon.

Senator JONES. Mr. Chairman, I just want to say this to Senator Nelson, that if this had for its purpose what he assumes I would not be in favor of it at all. I do not want to go off on any tangent, but it seems to me that the suggestion that they call together here some naval architects and some maritime engineers and concrete experts, just as we did with reference to the liberty motor, and see if they can design a ship that could be built expeditiously and without interfering with the present program, is a good one, and if it would utilize these materials which are now not being used and labor that is not being used to provide the ships for the carrying on of this war it would be a wise thing to do. This is only suggestive, and simply to let the Emergency Fleet Corporation know that if they take up a matter of that kind and try to develop something out of it they will not be subject to criticism, so far as that is concerned.

The CHAIRMAN. I think it is contemplated there shall be no delay or hindrance to the present program.

Senator JOHNSON. May I call your attention to the language of the resolution, Mr. Chairman? I think it has been very carefully drawn:

> We recommend their prompt consideration by the United States Emergency Fleet Corporation.

Then, if you will pardon me, Senator Nelson, the resolution proceeds:

> We believe that a body composed of concrete, naval, and maritime engineers of high standing should be called to Washington and asked and directed to consider and pass upon the feasibility of concrete over-seas ship construction, and if the same is deemed feasible to prepare and recommend the design of a ship best adapted to serve, etc.

It is merely a recommendatory resolution with respect to a matter of extraordinary importance, and as it is in that form, not asking anything except consideration and the determination of feasibility, I think it is a resolution that we could very readily pass.

Senator NELSON. I am not in favor of any rainbow chasing now, running after something that is in the crudest experimental stage. The Shipping Board has a big job on its hands to carry out the steel and wooden ship contracts they have made, and we want to expedite that work, and I can not see that this would do any good.

Senator RANSDELL. Mr. Chairman, I was very much impressed with the testimony of Mr. Robinson, and I think when we are undertaking something as important as the construction of the biggest mercantile fleet in the world, the greatest the world has ever seen—and that is what we are doing now—we ought to utilize every agency of ship construction that we possibly can. We are not going to complete our ships in the very near future; we are going to be after this, in my judgment, for some time. So, if the concrete ship will do anything like what Mr. Robinson claims for it, it will be both better and cheaper in the long run than the wooden ship or the steel ship. I am not prepared to say that it will be either, but if it can be constructed for 50 per cent, or even two-thirds, of the cost of the wooden ship or the steel ship, as he said it could, it is our bounden duty as business men, I think, to make the experiment. And what would the small sum of thirty, forty, or fifty million dollars for experimentation amount to when we are expending at the present time, as I understand it, $1,750,000,000 on these ships and undoubtedly will expend

great deal more before we get through? Senator Jones's proposition merely suggests, as Senator Johnson so clearly brought out, a study of this question, the bringing together of these great experts to see if something can not be devised, and if from the union of these men in council we can develop something. I believe it ought to be tried. I think this is the most progressive age the world has ever seen, and we are certainly in the midst of the greatest war the world has ever seen, and the greatest emergencies are confronting us as a Nation that we have ever had to deal with, and we ought not to hesitate to try anything that is as promising as these concrete ships. So I strongly favor that resolution.

(Upon roll call the motion was agreed to by a vote of 5 in the affirmative to 2 in the negative.)

The CHAIRMAN. The ayes have it; the motion is agreed to, and we will send it down to the Emergency Fleet Corporation for their consideration.

(Thereupon, at 4.50 o'clock p. m., the committee adjourned, to meet at 2 o'clock p. m. Thursday, January 31, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

THURSDAY, JANUARY 31, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., Hon. Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Bankhead, Nelson, Jones, Harding, Calder, and Johnson.

The CHAIRMAN. Gentlemen, we have Mr. Williams, the State engineer of New York, here this afternoon, and I suggest that we hear him now.

Will you state your full name and place of residence, Mr. Williams?

STATEMENT OF HON. FRANK M. WILLIAMS, STATE ENGINEER OF NEW YORK, ALBANY, N. Y.

Mr. WILLIAMS. My name is Frank M. Williams; I reside in Albany, N. Y.

The CHAIRMAN. What business are you engaged in now?

Mr. WILLIAMS. I am the State engineer of the State of New York, and, as such, am in charge of the construction of the State Barge Canal.

The CHAIRMAN. How long have you had charge of that work, Mr. Williams?

Mr. WILLIAMS. About five years.

The CHAIRMAN. What is the situation now as to the work on the Barge Canal?

Mr. WILLIAMS. May I make a general statement, Mr. Chairman?

The CHAIRMAN. Yes; certainly.

Mr. WILLIAMS. In order to refresh your recollection as to the location of this canal, I have here [indicating] a map, which shows its location across the State of New York. You will observe from that that the Barge Canal includes something more than what we call the Erie Canal. It includes more than a connection between Lake Erie and the Hudson River; because, under the same act under which we are operating, in the construction of the main-line canal, or the east and west canal, we are also constructing the Champlain Canal, which extends from the Hudson River to Lake Champlain; the Oswego Canal, which extends from a junction with the Erie Canal to Lake Ontario; and the Cayuga and Seneca Canal, which connects the Erie Canal with the central New York lakes. As far as the immediate interest in the canal is concerned, however, the East and West Canal is the principal line.

The CHAIRMAN. What are those distances?

Mr. WILLIAMS. The Erie Canal is about, in round numbers, 340 miles long; the Champlain Canal is 60 miles long.

The CHAIRMAN. Well, you say the Erie is 340 miles; give the termini of that, please.

Mr. WILLIAMS. It extends from the Niagara River at Tonawanda to Waterford, on the Hudson River.

Senator NELSON. That is right north of Troy, is it not?

Mr. WILLIAMS. Yes, sir.

The CHAIRMAN. What is the width of the canal, and what is its depth?

Mr. WILLIAMS. The depth of the canal is uniformly 12 feet; and the width is not less than 75 feet on the bottom. About 52 per cent of that canal, however, has a width in excess of 75 feet, lying in the bed of the Mohawk, Seneca, and Oneida Rivers, and Oneida Lake; and in those sections it has a width of 200 feet. The minimum cross-sectional area is fixed by law at 1,128 feet.

The CHAIRMAN. What are the dimensions of the locks?

Mr. WILLIAMS. The locks are 36 in number, between Waterford and the Niagara; they have a capacity of 300 feet in length, 44½ feet wide, and 12 feet of water over the miter sills.

Senator NELSON. How many are there?

Mr. WILLIAMS. Thirty-six.

The CHAIRMAN. The map shows 36.

Mr. WILLIAMS. That is, we are speaking now of the East and West Canal—the Erie Canal.

The CHAIRMAN. The Erie Canal—that connects with what?

Mr. WILLIAMS. That is the one that connects the Niagara River, or Lake Erie, with the Hudson River at Waterford.

Senator CALDER. That connects the Hudson River with the Great Lakes, does it not?

Mr. WILLIAMS. Well, with Lake Erie. The other connection, the Oswego Canal, connects the Hudson River with Lake Ontario.

Senator NELSON. Does it follow the line of the old canal?

Mr. WILLIAMS. Very closely; yes, sir, except that the old canal was built uniformly in an artificial channel.

Senator NELSON. Yes.

Mr. WILLIAMS. This canal is built in the beds of rivers and streams wherever possible, leaving altogether the artificial channel.

Senator NELSON. I have a pleasant remembrance of the old canal, because I was a passenger on it in 1849; I went the whole length of the old canal.

Mr. WILLIAMS. Yes, sir; that was before my day, of course.

The CHAIRMAN. Now, the next canal; give us the termini and the distance of that.

Mr. WILLIAMS. The Champlain Canal has its southern terminus at Troy, right near Waterford, on the Hudson River, and its northern terminus on the southern end of Lake Champlain, and it is 60 miles long.

Senator NELSON. Is there an outlet to the north from Lake Champlain by the Richelieu River?

Mr. WILLIAMS. Yes, sir; there is.

Senator NELSON. And is there a canal there which connects that with the St. Lawrence River?

:. WILLIAMS. Yes; the Canadian Canal, known as the Chambly
l.
nator NELSON. Does that run from Lake Champlain to the St.
rence River?
:. WILLIAMS. No: it is a canal built around some rapids in the
elieu River; but it makes navigation possible between the St.
rence River and Lake Champlain.
e CHAIRMAN. Now, the next canal; please describe that.
:. WILLIAMS. By the way, the Champlain Canal is built; the
go Canal is also built and extends from Lake Ontario to a
ion of the Erie Canal; that is 22 miles long and that is finished.
nator NELSON. I see there is a branch leading south from those
lakes.
:. WILLIAMS. Yes; Lake Cayuga and Seneca Lake.
nator NELSON. Are those lakes navigable?
:. WILLIAMS. Yes, sir.
nator NELSON. For how long a distance?
:. WILLIAMS. About 40 miles each.
e CHAIRMAN. Do all of these canals have a depth of 12 feet?
:. WILLIAMS. Yes, sir; the canal has a uniform depth and a
orm lock capacity, and except for the widening in the natural
channels and lakes it is of uniform width.
e CHAIRMAN. Please describe the next canal.
r. WILLIAMS. The next canal is the one to which the Senator has
red, which connected the Erie Canal with the Cayuga and
ca Lakes, and that is known as the Cayuga and Seneca Canal.
nator NELSON. There seems to be a branch running north from
, too, judging from this map [indicating].
r. WILLIAMS. That is the Oswego Canal, which I described a
ent ago.
e CHAIRMAN. Well, beyond the branch that goes into Cayuga
there is apparently another branch running north. Is that a
l?
:. WILLIAMS (examining map). No. That is a division boundary

nator NELSON. This [indicating on map] is the Oswego Canal?
r. WILLIAMS. That is the Oswego Canal, and this is the Cayuga
Seneca Canal.
nator NELSON. What do you call this canal [indicating on
l?
:. WILLIAMS. That is not a canal; that is a feeder to the main
, for the water supply.
nator NELSON. Is that [indicating] a feeder, too?
:. WILLIAMS. That is another division boundary line.
e CHAIRMAN. This canal from here [indicating] turning to the
is what?
:. WILLIAMS. That canal from that point west is a part of Erie
l, and that line [indicating] contains the only work that is not
lete. We have all work under contract and will have the canal
ed on May 15, unless our contractors are held up by the impos-
ty of getting coal or supplies.
nator NELSON. Where is the summit level of the canal?
r. WILLIAMS. The summit level of the canal is at Rome, just
e it was in the old times.

Senator NELSON. Will you point it out on this map?

Mr. WILLIAMS. Yes, sir; it is right there [indicating].

Senator NELSON. So that, going from the east, you would until you got to that point [indicating], and then from there is down grade?

Mr. WILLIAMS. Not precisely; from there west it is dowı to that point [indicating]; and then it rises again uniformly to the west; in other words, there is a summit in the vici Oneida Lake.

Senator NELSON. Is that the lowest place [indicating]?

Mr. WILLIAMS. That is the lowest place; and just east of what we call the summit level, because there is no opportunity through artificial means, of getting water into that summit le that is the reason for building this reservoir system up there.

The CHAIRMAN. Mr. Williams, will you go on with your st that you wanted to submit to the committee?

Mr. WILLIAMS. Well, I wanted to submit to the committ That the Erie Canal, which is the main east and west cana the State of New York, lying almost directly on the route o transportation from the West to the East, will be open for nav in May, 1918—on May 15.

The difficulty with the canal is that there is little floating ment at this time; and the reason for that is that the old cana we enlarged, had a complement of small boats, 240-ton boats have gradually been decaying and becoming unused, rotting and no private capital has as yet invested money in the const of barges for the new canal for the reason that until it is rigl the point of being finished that would have been an unwis for private capital to do.

Senator NELSON. In the old canal you had a towpath ar horses and mules on it, did you not?

Mr. WILLIAMS. Yes, sir; but in this new canal that is dor with.

Senator NELSON. You have no towpath on the new canal?

Mr. WILLIAMS. No.

Senator NELSON. And the boats are to be pulled by the motive power, are they?

Senator CALDER. Or by tugs?

Mr. WILLIAMS. Or by tugs. Now, the canal was plann built, of course, as a commercial enterprise. We have calcula it would take four or five years for the canal to reach its full c and its capacity of a minimum of 10,000,000 tons of freight, think it would have done if the war had not upset commercia tions to the extent that it has.

For a considerable period prior to the entrance of the States into the war our railroads were becoming more and m gested, and the placing of embargoes on various classes of had become necessary, and the necessity was occurring at ingly frequent intervals. Since our participation in the s even greater demands have been made upon our rail lines an been found that the consequent congestion, due to lack of stock, motive power, and terminals required to meet the ex nary requirements, has become so great that it has been foun sary for the Government to take over the operation of the ra

and probably with them all the transportation facilities of the country, in order to permit, by coordination, of a solution of the transportation problem. Even in advance of this step the Government had found it essential to take over and provide for trans-Atlantic shipping. It is apparent, therefore, that in working out the problem the Government began at the eastern end of the line of communication and is gradually working back to the points where originate the freights which must ultimately be delivered in Europe. It is not beyond the range of probability, then, that as the governmental control of transportation is extended and perfected, not only the railways of the country but its waterways and highways must also be called upon, under a regulated plan, to perform their proportionate part, and the Erie Barge Canal thus assumes an importance as a military adjunct not dreamed of by its projectors, who had in mind only its commercial possibilities.

It is an artery leading from the very heart of the Middle West and serves as a very natural outlet for freights originating in the Great Lakes region and destined for the Atlantic seaboard. It is capable of floating upwards of [illegible] tons of freight per year, and as the one phase in our transportation problem which stands out preeminently is the fact that the constant and [illegible] direction which our military supplies must follow is from west to east, the ideal location of the canal, which lies directly upon this west-to-east line, can be readily appreciated. The great lack of the canal system, and that which may prevent it from playing the part it should play in this emergency, is the shortage of [illegible] present available. This has arisen from a [illegible] particularly for the reason that the [illegible] ber of small companies and individual boat owners, [illegible] their boats by means of horsepower and whose [illegible] was relatively small. Inasmuch as the barges [illegible] vided with towing paths and all craft [illegible] propelled by mechanical power, this [illegible] increased size of boat which [illegible] much larger investments than have hitherto been [illegible] a result [illegible] capable of using the full [illegible] enlarged canals were really the [illegible] such floating equipment. It has [illegible] authorities that [illegible] before sufficient [illegible] carry their maximum [illegible] of all transportation [illegible] ever, will not [illegible] to play its part in the winning of the war [illegible] boats available for the [illegible] May, and owing to the [illegible] and the difficulty of obtaining [illegible] for some time the private [illegible] tation companies, would not be [illegible] demands. Appreciating the [illegible] to very materially [illegible] zation of the State, the State [illegible] legislature have suggested [illegible]

of immediately beginning the construction, by the Government, of barges to operate on the canals next summer.

The State of New York has nothing to gain from this except as one of the units of a Nation which is at war. For such a program it will have provided, at an expense of somewhat over $150,000,000, the right of way, the medium of flotation, and assumes all the burdens of maintenance and operation of structures. Beyond this, in its 100 years of canal experience, the State has never gone, nor should it be called upon for anything further at this time. The State's waterways are as free, so far as charge for their use is concerned, as are the waters of the Atlantic Ocean, upon which the Shipping Board proposes to place Government-built vessels. It is a free canal.

It is reported that the Government has decided to spend a considerable sum of money in building barges to operate on the Ohio and Mississippi Rivers, upon which streams much money has been expended by the Federal Government to make navigation possible. The States lying alongside these inland waterways have not contributed to their improvement. The freight conveyed upon them by the barges proposed by the Government will not move toward the east, which is the direction which our war freights should take if they are to move on the well-known principle of the direct line as the shortest distance. I believe that when the Government officials compare the amount of benefit which could be derived in the lightening of congestion on the east and west lines by the use of the barge canal properly equipped with barges, to the benefits derived by the operation of barges on any other inland waterway in the United States, it will be found, without question, that the balance will stand in favor of the only inland water route within the limits of the United States connecting the Great Lakes with the seaboard.

The CHAIRMAN. The State owns the entire system of canals, does it not?

Mr. WILLIAMS. The State owns the entire system and operates all the structures, but never has operated or owned any boats.

Senator CALDER. Will you state at this point, Mr. Williams, whether the use of the locks is also free?

Mr. WILLIAMS. Absolutely free.

Senator NELSON. What style of boats do you contemplate using on the new canal?

Mr. WILLIAMS. Well, there have been propositions advanced for the use of about three types of boats, but I think the more favorable type will be a boat 150 feet long by a little over 21 feet wide and drawing from 9 to 9½ feet of water.

Senator RANSDELL. And carrying how many tons?

Mr. WILLIAMS. That kind of boat will carry something like 65 tons. Now, three of those boats, with an additional boat of the same size, equipped with power, can all be locked through one of our locks at one lockage.

Senator RANSDELL. What is the size of the locks?

Mr. WILLIAMS. The locks are 44½ feet wide, a little over 300 feet long, and 12 feet of water over the sills.

Senator RANSDELL. That will enable you to put two boats side by side and have two endways, or four going through the locks at the same time?

Mr. WILLIAMS. Yes, sir; if one of those boats is equipped with power, it can take those consorts and draw them through the locks.

Senator RANSDELL. The plan is to have one of them carry its own power?

Mr. WILLIAMS. Yes, sir.

Senator RANSDELL. And to have three consorts without any propelling power?

Mr. WILLIAMS. Yes, sir.

Senator NELSON. What power do they contemplate using—motor power or steam power?

Mr. WILLIAMS. I am inclined to think the best power will be internal-combustion engines.

Senator NELSON. Have you riprapped the banks of the canal?

Mr. WILLIAMS. We have where it is subject to wash. But where we are in the beds of the rivers and the lakes the bank limits of the canal are so far from the center that it is not necessary to protect that except at isolated points.

Senator NELSON. The reason I asked that question was that under the old system of horse and mule power you did not have that quite to contend with, but where boats have their own motive power there is apt to be more washing, is there not?

Mr. WILLIAMS. Much more wash. However, the old canal, as it developed in the last few years, has been operated quite largely by motive power other than horses, so that we have had that to contend with in the old canal.

Senator RANSDELL. What is the ruling width and depth of the canal?

Mr. WILLIAMS. The uniform depth is 12 feet, and the minimum width is 75 feet on the bottom. That would make it about 123 feet of water surface in an ordinary earth section.

Senator RANSDELL. So that you could easily propel two boats with a width of 21 feet and a depth of 9 feet side by side?

Mr. WILLIAMS. Yes, sir.

Senator RANSDELL. There would be plenty of space under the bottom of the boat?

Mr. WILLIAMS. Yes, sir.

Senator RANSDELL. You would need 2 or 3 feet under the bottom of the boat in order to make any speed on the canal?

Mr. WILLIAMS. Yes, sir; it is impracticable to drag any boat on the bottom for 340 miles.

Senator RANSDELL. So that you do not contemplate having boats that draw any more than 9 feet in the 12-foot canal?

Mr. WILLIAMS. The maximum ought not to be more than 10 feet in my judgment; I should say that the most economical draft would be about 9 or 9½ feet.

Senator RANSDELL. Do you know what percentage of the canal follows the natural channel, and what had to be cut through the banks?

Mr. WILLIAMS. About 52 per cent is in the natural channels.

Senator RANSDELL. In the natural channels?

Mr. WILLIAMS. Yes, sir.

Senator RANSDELL. The old canal was very largely alongside of the rivers?

Mr. WILLIAMS. Altogether alongside of them.

Senator RANSDELL. I have been on it as a boy.

Mr. WILLIAMS. The old canal, as I say, is altogether in an artificial channel, whereas the greater part of this new canal is not.

Senator RANSDELL. You have riprapped the greater part of it?

Mr. WILLIAMS. Yes, sir.

Senator RANSDELL. Wherever there is danger of wash you have riprapped the banks?

Mr. WILLIAMS. Wherever there is any danger of wash.

Senator JONES. As I understand, New York owns the canal and maintains it at its own expense, and any citizen has a right to use it with any kind of boat that he desires to use?

Mr. WILLIAMS. Well, we are limiting that to a boat that he can operate under the conditions that exist.

Senator JONES. Of course a man would not be allowed to use it for a boat that could not be operated in the canal?

Mr. WILLIAMS. They must be operated under the direction of the superintendent of public works.

Senator RANSDELL. And I understood you to say, in answer to a question of Senator Calder, that the State also operated the locks free?

Mr. WILLIAMS. It also operates the locks free.

Senator CALDER. Without any expense to the user.

Mr. WILLIAMS. Yes. Those locks are pretty good size structures [handing photograph to Senator Ransdell].

Senator RANSDELL. When did you say this canal would be completed so that it could be used?

Mr. WILLIAMS. On the 15th of May.

Senator RANSDELL. Of this year?

Mr. WILLIAMS. Yes, sir.

The CHAIRMAN. Mr. Williams, what is it proposed that you shall ask the Federal Government for in the way of equipment? What kind of equipment and on what terms?

Mr. WILLIAMS. Well, Mr. Chairman, I am not prepared to say what terms the Government ought to make if it equipped the canal, because I do not know what the policy of the Government has been in relation to other waterways. The State of New York has not anything to gain by the use of this canal as a war measure; but we do feel that it is our duty to notify the Government that it is to be completed and ready for operation, if the Government sees fit to use it and the State is willing to pay the expenses of maintaining it and operating it.

Senator JONES. In other words, you are simply asking the United States Government to make use of a canal like a citizen would?

Mr. WILLIAMS. Exactly.

Senator JONES. And you are calling our attention to the fact that you will have that ready by the middle of May?

Mr. WILLIAMS. That is it exactly.

Senator JONES. That it will be ready to use, and that the Government is at liberty to use it?

Mr. WILLIAMS. Yes, sir; that is correct.

Senator RANSDELL. I suppose you would expect the Government to use it just like it would use any of the big natural waterways of the United States, such as the Ohio and Mississippi Rivers?

Mr. WILLIAMS. Well, I do not know exactly how the Government proposes to utilize those channels.

Senator RANSDELL. There is a proposition in the pending railroad bill for the President to construct barges and boats for operation on the canals and rivers of the country, and to operate them under the Director General of Railroads. The Director General of Railroads has been strongly urged by a good many people to create a director of waterways, to operate under him, and to push the building of these transportation agencies, such as boats and barges, on the various waterways of the country, including canals; and I know that the Erie Canal is one of those that have been strongly brought to his attention.

Mr. WILLIAMS. Well, we would be glad to have it operated in any way by the Government that would make it useful as a transportation agency.

Senator NELSON. There would be no charges on any boat from one end of the canal to the other, then?

Mr. WILLIAMS. No charges.

Senator RANSDELL. No more than on an open river; no more than on the Hudson River from Albany to New York?

Mr. WILLIAMS. No more than from Albany to New York, on the Hudson. It is a free canal.

Senator JONES. In other words, you are not urging upon the Government anything, but are simply calling attention to the fact that you will have a canal there ready to use by the middle of May?

Mr. WILLIAMS. That is all. I do not think it is the part of the State to urge this thing, because the State is not carrying on the war; it merely happens to have this canal at such a stage that it will be ready on the 15th of May. Neither is it within our province to say that it is a military measure; we have not the knowledge or the ability to determine those questions. But you are precisely right; it is our duty to call to the attention of the Government the fact that it will be ready; and that is what we are trying to do.

Senator RANSDELL. Mr. Williams, it has been said that there are several hundred barges that are available for use on that canal; is that correct, or do you know?

Mr. WILLIAMS. Well, the situation in reference to that is this: There are something like 400 of those 240-ton barges which are in such shape that they, perhaps, could be repaired and made available for service. The majority of those barges are doing lighterage duty in New York Harbor, and I assume they would have to be, perhaps, commandeered by the Government to get this service.

Senator RANSDELL. They are doing very valuable service where they are; is that not correct?

Mr. WILLIAMS. I think they are doing very valuable service where they are.

The CHAIRMAN. Are they owned by the State?

Mr. WILLIAMS. No; they are owned by individuals. Now, that type of barge, however, is somewhat obsolete for this canal, because it is a good deal smaller than the size that can be accommodated on it.

Senator RANSDELL. They do not draw over 6 feet, do they?

Mr. WILLIAMS. Six feet is their draft. And all they carry at the best is 240 tons.

Senator NELSON. And they do not have their own motive power?

Mr. WILLIAMS. Very few of them have.

Senator RANSDELL. And the barge you contemplate will carry 650 tons?

Mr. WILLIAMS. Six hundred and fifty tons. And that would mean that a fleet of four barges would carry more than 80,000 bushels of wheat; about 85,000 bushels.

Senator NELSON. That is, four barges?

Mr. WILLIAMS. Yes, sir.

Senator RANSDELL. They would carry 2,600 tons; that would be a pretty good sized cargo that the fleet would carry?

Mr. WILLIAMS. Yes, sir.

Senator NELSON. Does the tide flow up to the mouth of the canal—the eastern end of the canal?

Mr. WILLIAMS. Yes, sir; it does in the Hudson River.

Senator NELSON. That is what I mean.

Mr. WILLIAMS. Yes; there is a tidal range that reaches up to Troy.

Senator NELSON. Well, Troy is below the mouth of the canal?

Mr. WILLIAMS. Well, Waterford and Troy are practically opposite each other.

Senator HARDING. So that the tide reaches up to the mouth of the canal?

Mr. WILLIAMS. Yes, sir.

Senator HARDING. Would it be possible to take a hull constructed at any one of the Great Lakes shipbuilding plants and transport it by way of the canal to New York City?

Mr. WILLIAMS. It would depend on the dimensions of the hull. There is one dimension of this canal that I have not given you, and that is the overhead dimension.

Senator HARDING. That is the bridge dimension?

Mr. WILLIAMS. Yes, sir; the bridge dimension, or the clearance line between the bridge and the water surface; that is, 15½ feet. Of course, if you built a hull with upper works on it that extended over that clearance, it could not be accommodated on the canal. There are 232 bridges crossing this canal, 48 of them are railroad bridges; and any project involving making these bridges movable would involve an expenditure, in readjustment of railroad conditions, that would probably be out of the question, and also would take too much time anyhow.

Senator HARDING. And the only possible object of making a greater clearance would be to meet an emergency of that kind?

Mr. WILLIAMS. Yes, sir. Now, as to the construction of those barges, it seems to me that if the Government desires to go into the matter it could be taken up on the Great Lakes, or along the line of the canal itself, so that it would not interfere in any way with the shipbuilding program of the Government on the coast, or interfere with the labor employed in those plants. It seems to me, particularly if the Government decided to build wooden barges—most of the contractors that we have on the canal built their own hulls for their barges and their floating equipment; and they have, in many cases, their crews still with them, and the yards in which they constructed those hulls.

Senator HARDING. Are there good facilities at Buffalo for the ransfer of lake cargoes of grain to the barges which will take them o New York?

Mr. WILLIAMS. Well, there are fair facilities; yes, sir.

Senator RANSDELL. Have your builders considered concrete as a aterial for making those barges?

Mr. WILLIAMS. Well, we have considered it somewhat, although t is new to us. We have not done anything in that line.

Senator NELSON. Can ocean vessels go up there to Troy—up the Hudson River?

Mr. WILLIAMS. No; they can not.

Senator NELSON. The water is not deep enough?

Mr. WILLIAMS. No; the water below Troy for several miles is less han 12 feet at low tide.

Senator NELSON. It is not as deep as the canal?

Mr. WILLIAMS. Not as deep as the canal at present; although the overnment is dredging there now, and they say they will have it one by spring.

Senator NELSON. So that the barges would have to go to New ork City, if they carried freight to be shipped abroad?

Mr. WILLIAMS. No; they could meet ocean-going ships as far up ne Hudson River as Kingston. That is above Poughkeepsie.

Senator NELSON. How far is that from New York?

Mr. WILLIAMS. That is 90 miles from New York. But, of course, here are not any facilities there great enough for the interchange of reight.

Senator NELSON. There are not any warehouse facilities?

Mr. WILLIAMS. No. Of course the disadvantage of shipping grain y barges into New York Harbor, it seems to me, would be that the levator capacity in New York Harbor is small at present.

Senator NELSON. It is congested there?

Mr. WILLIAMS. It is quite congested there.

Senator NELSON. They have insufficient terminal elevators?

Mr. WILLIAMS. Well, they have, I should say, a small capacity.

Senator NELSON. Yes.

Mr. WILLIAMS. However, they transfer very much of their grain y means of floating elevators. In order to get to those floating ele- ators, they bring their cars of grain down and dump them into ighters, and lighter them into the ships. Now, one handling is lone away with when this grain comes down in barges and is run longside the ship to be handled by floating elevators.

Senator NELSON. You think they could load direct from the barge- nto the ship?

Mr. WILLIAMS. Yes, sir; they could with a floating elevator equip- nent.

Now, the reason why private capital hesitates to embark in this roposition of building barges at present is, in my judgment, ecause of the fact that general prices of boat-building mate- ials have pretty nearly doubled in the last three years. There ould be no investment on the part of a private corporation or an ndividual, except in its or his barges; he would not have anything nvested in right of way; he would not have any investment to main- ain except his barges. Therefore, his whole capital investment ould be in the barges themselves.

Assuming that he built barges at the present prices and attempted to capitalize his operations on that basis, and then peace brought a reduction in the prices of materials, he would then be called upon to compete with somebody else who, on this free canal, could come in and build barges at a very much less cost, and would therefore have a very much smaller capital charge and could operate much more cheaply, and very much to the disadvantage of the man who went in at this time of high prices.

Senator NELSON. Let me ask you this question: Have your people up there been building barges to some extent to get ready for the opening of the canal?

Mr. WILLIAMS. To a limited extent—very limited.

Senator NELSON. Does the State reserve the power to regulate the rates on the canal for carrying freight on the boats going through the canal?

Mr. WILLIAMS. It has not any power at the present time; that may be given to the public-service commission later.

Senator NELSON. It has not any power now?

Mr. WILLIAMS. No.

Senator NELSON. It has no power to regulate rates on the canal?

Mr. WILLIAMS. No.

Senator NELSON. The only regulator would be the competition with the railroads?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. Is the canal completed?

Mr. WILLIAMS. It will be open next spring. That does not mean that it is entirely completed, however, because there will be trimming up and bridges to build after that opening. But so far as the navigation section is concerned, it will be opened.

Senator BANKHEAD. The locks will all be completed then?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. And the canal dredged to a proper depth—12 feet?

Mr. WILLIAMS. Yes, sir.

Senator RANSDELL. The practical proposition will be starting a transportation system, as I understand it, which does not exist, when you get that canal completed. The old transportation system is a thing of the past, those old boats have been practically unused for several years. And you will now have a canal which will accommodate and call for so much larger boats that it amounts practcially to beginning an entirely new transportation system there, does it not?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. What is the size of the canal?

Mr. WILLIAMS. Of course, this new canal has been built at the same time that they have been operating the old one. We have never abandoned navigation on the old canal; and last year we carried 1,300,000 tons of freight—which is altogether too small for that canal.

Senator BANKHEAD. What is the carrying capacity of the barges you use on your new canal—how many tons?

Mr. WILLIAMS. I just explained that, Senator.

Senator BANKHEAD. I am sorry, but I was not here at the time.

Mr. WILLIAMS. My best idea would be to have a fleet of barges totaling about 2,500 tons.

tor BANKHEAD. Each barge?
WILLIAMS. No; the total, the four; the four being locked h at one lockage at any lock that we have.
tor BANKHEAD. Can you lock four and tow them through any those locks without breaking the tow?
WILLIAMS. We can—of the dimensions I have suggested, 150 ıg by approximately 21½ feet wide, and drawing from 9 to 9½ ɔur of those will go through the locks at one time.
tor RANSDELL. Each having a capacity of 650 tons?
WILLIAMS. All except the boat having the motive power, which have that capacity, less its weight of engines, etc.
tor RANSDELL. Yes. I suppose that during the years that ve been getting ready for this new canal, the owners of the ıts have been allowing them to wear out and have not been ng them?
WILLIAMS. That is it.
tor RANSDELL. And you have pretty nearly gotten rid of your tem, and have not yet got a new system; is that correct?
WILLIAMS. That is about it.
tor RANSDELL. The new canal has been under construction ı long?
WILLIAMS. About 12 years.
tor BANKHEAD. The boats on the old canal were very much ·, were they not?
WILLIAMS. Yes, sir; the rated capacity of the old boats was ıs.
tor BANKHEAD. Only 240 tons?
WILLIAMS. Yes, sir; only 240.
tor CALDER. How much did this new canal cost the State?
WILLIAMS. The canal channel itself, with its locks and struc- ɔost the State $135,000,000, and with the terminals which were ed for later, there is to be added to that amount $19,800,000.
tor CALDER. And the Federal Government contributed noth- that improvement?
WILLIAMS. No: not as yet.
tor RANSDELL. Does that include the line up to Lake Cham- and up to Lake Ontario, at Oswego?
WILLIAMS. Yes, sir: it includes all four of those canals that pointed out on the map.
tor NELSON. You spoke about terminal facilities. Do you ıplate building docks and warehouses and elevators at the als?
WILLIAMS. We have contemplated building docks and ware- and handling machinery for general freights, but as yet no on has been made for building elevators.
tor CALDER. Mr. Williams, please state the number of those als and where they are located.
WILLIAMS. There is a large number of them, Senator Calder. of them have not as yet been constructed. But altogether re about 50. Do you want me to give all the locations down h the State? There is a long list of them.
tor CALDER. Well, perhaps you would prefer to insert that in atement when you revise it, if you can not give the informa-

tion off-hand. But I would like to have the correct number of terminals, and where they are located.

Mr. WILLIAMS. If the members of the committee are interested, I will give them the locations, but it will require naming a good many places, some of them very small, that the Senators may not be familiar with. There are, however, 13 terminals contemplated in the harbor of New York, which will cost about $9,500,000. The other terminals are located along the line of the canal as far west as Buffalo, and north to Lake Champlain.

The terminals on the Erie Canal are located as follows: Buffalo (2), North Tonawanda, Tonawanda, Lockport (2), Middleport, Medina, Albion, Holley, Brockport, Spencerport, Rochester, Pittsford, Fairport, Palmyra, Newark, Lyons, Weedsport, Baldwinsville, Syracuse, Constantia, Cleveland, Rome, Utica, Frankfort, Ilion, Herkimer-Mohawk, Little Falls, St. Johnsville, Fort Plain, Canajoharie, Fonda, Amsterdam, Schenectady, Crescent, Cohoes, Troy (2), Albany, New York (13). Besides these there are also terminals on the Champlain, Oswego, and the Cyuga and Seneca Canals.

Senator BANKHEAD. I came in late, and you may have answered this question; if so, you need not answer it again. But what are the lengths of the different branches of the canals?

Mr. WILLIAMS. The length of the Erie branch is 340 miles; the length of the Champlain Canal is 60 miles; the Oswego Canal, 22 miles; and the Cayuga-Seneca Canal is 22 miles; making a total of 444 miles.

Senator BANKHEAD. How many locks are there?

Mr. WILLIAMS. Thirty-six on the main line—the Erie Canal.

Senator BANKHEAD. How long would it take to make the round trip from Buffalo to New York?

Mr. WILLIAMS. Well, allowing an average speed of about 6 miles an hour—and, of course, that would depend on the power of the engine in the boat—but assuming 6 miles an hour, which ought to be made, the trip from Buffalo to New York can be made in 84 hours. That is allowing half an hour for each lock; that is an ample allowance, because you can lock them through in 15 minutes.

Senator BANKHEAD. How long would it take a freight train to make that trip?

Mr. WILLIAMS. Well, I do not think I am qualified to answer that definitely. I will simply give you my idea of it; and somebody else can answer it later to better advantage. I should say that the best you could possibly do with a freight train would be four days to get down there.

Senator BANKHEAD. If you could make it in four days, you would be making a better speed than they usually do for that distance.

Senator CALDER. So that by the operation of these barges the trip could be made from Buffalo to New York as quickly as by rail in normal times?

Mr. WILLIAMS. Yes.

Senator RANSDELL. It could be done more quickly than the freight trains. I do not think there is any doubt about that.

Mr. WILLIAMS. I think much more quickly.

Senator VARDAMAN. I think the average now is something less than 30 miles a day on a freight train.

Mr. WILLIAMS. Well, that is giving credit for everything they claim on the railroads. I would not like to say that they can not do that.

Senator CALDER. So that the State of New York offers to the country a great waterway at its own expense, and proposes to the Government that they build barges and tugboats, so that in this war emergency they may avail themselves of this opportunity?

Mr. WILLIAMS. That is the idea, Senator Calder; on the theory that, if this is a war measure, the Government is the proper authority to take it up.

Senator CALDER. You have been informed, I presume, that the Shipping Board is constructing barges and tugboats for the Mississippi River, have you not?

Mr. WILLIAMS. I have read that in the newspapers: yes, sir.

Senator CALDER. That is a fact.

Senator BANKHEAD. I understood you to say that it would require about 84 hours to make the trip to New York with those barges?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. Then, it would take 84 hours to make the return trip also; that is, the 84 hours is one way only?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. Then, you would have to double that for the round trip?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. And, of course, your barges and tows would have to get back?

Mr. WILLIAMS. Yes, sir; and, of course, you would have to add to that your terminal delays, whatever they might be.

Senator BANKHEAD. Yes; I simply wanted to get an idea of the time you would consume in a round trip.

Mr. WILLIAMS. Yes, sir.

Senator VARDAMAN. You gave the distance on the main canal, I believe, as 340 miles?

Mr. WILLIAMS. Yes, sir.

Senator VARDAMAN. Do you know the time that is consumed in transporting freight over the trunk-line railroads now?

Mr. WILLIAMS. No; I would not want to express an opinion on that.

(At this point there was an informal discussion which the reporter was directed not to record.)

Senator CALDER. Mr. Williams, assuming that the figures which have just been given by Senator Vardaman are correct, it would take 16 days to go from New York to Buffalo, 150 miles from New York to Albany, and 340 miles from Albany to Buffalo?

Mr. WILLIAMS. Well, I understood that I was asked to limit that answer to normal times. We checked up some carloads of grain going down from Buffalo to New York and found that the average was about 11 days; but that was two or three months ago, and of course you can not call that a normal movement.

Senator RANSDELL. If I may be allowed to interrupt, I will say that several years ago, when times were normal, the Interstate Commerce Commission made a rather elaborate study of the movement of freight on the freight cars of the country; and taking the general

average, they showed that the freight cars moved about 25 miles in 24 hours, an average of a little over 1 mile an hour. Now, that was several years ago. I can not give the exact dates, but I remember it well. That was in normal times.

Senator VARDAMAN. I am not sure, but I think the record for October on one of the great trunk lines was 20 miles a day.

Senator HARDING. Well, of course, if you are going to go into that analysis, you will want a great deal of testimony on the subject. It is only fair to say that you can take a fast freight train in New York and deliver a carload of freight at St. Louis in 60 hours. That is done in normal times, but that is a specially favored freight.

Senator RANSDELL. We are simply trying to get the general average.

Senator HARDING. Yes; I like this idea of using the canal; but in this discussion, while you are taking the most favorable passage possible in the canal, you are comparing it with the war-time paralysis on the railroads. And that is hardly fair. I am not objecting to your scheme; I favor it. I wish the Government would adopt all those transportation facilities.

Senator BANKHEAD. I do not think, Senator Harding, that we made any comparison between what conditions on the canal would be in normal times and the conditions on the railroads now; the comparison has all been made under normal conditions. If you were to compare it with conditions on the railroads now, the result would be much more unfavorable to them.

Senator HARDING. Well, if those figures are intended to apply to the freight trains in normal times, I think you are very much mistaken.

Senator VARDAMAN. Well, in normal times, a freight train would not average more than 40 miles a day.

Senator HARDING. Well, that depends on just what you mean by that; if you mean to include terminal delays, and other things of that kind, that would be very different.

Senator VARDAMAN. It means everything, of course, including terminal delays. Of course, you could make a freight train go 60 miles an hour in normal times.

Senator HARDING. Well, I live about 300 miles from Chicago; and I want to say that a freight train has never exceeded 36 hours in going to Chicago.

Senator VARDAMAN. Well, that may be true; but we are talking about the movement of the cars; the delays; the time on the sidings, and the loading, and all that sort of thing. Of course, if the train of cars is made up, it can go as fast as the engine can pull it.

The CHAIRMAN. Is there any other question that the members of the committee wish to ask Mr. Williams?

Senator CALDER. Mr. Williams, do you want to add anything to what you have said?

Mr. WILLIAMS. I think not, Senator Calder.

Senator CALDER. Mr. Chairman, may Mr. Williams be permitted to revise his statement?

The CHAIRMAN. Yes; certainly.

Senator CALDER (continuing). And to add any explanation that he thinks may be of interest to the committee?

The CHAIRMAN. Yes; without objection, he may do that.

Senator CALDER. And will you please include, Mr. Williams, in your revision a statement of the number of cities in New York which are reached by the canal?

Mr. WILLIAMS. I will be glad to do that, Senator Calder, and also to give those places which have terminal facilities.

Senator RANSDELL. I suggest, Mr. Chairman, that Mr. Williams be permitted to add to his statement if he so desires.

The CHAIRMAN. All right.

Senator CALDER. Thank you. Mr. Chairman, is it possible to have the map which Mr. Williams has furnished printed in the record of these hearings?

The CHAIRMAN. I do not believe that can be done; it would be necessary to have the original map.

Senator CALDER. Well, I suggest that Mr. Williams submit the original map; and then if we find that it can be reproduced in the record we will do so; and if not we can keep it on file.

Mr. WILLIAMS. Yes. I will send a map. When I came down here I had no idea that I was to appear before this committee, and so I brought little material with me.

(Mr. Williams subsequently submitted a map, which is in the committee files.)

Senator JONES. Have any of the authorities of the State of New York called the situation to the attention of the Shipping Board and the War Department and the various other war activities of the Government?

Mr. WILLIAMS. Yes, sir: I have done it personally; and so has the superintendent of public works, and the canal board of the State has asked the legislature to communicate with the Federal authorities, calling their attention to it. That was done last summer, on the promise that we would open the canal May 15.

Senator JONES. The reason I asked that was because if you had not done that I thought it would be well for this committee to call the attention of those authorities to what you have submitted to us here to-day; but that does not seem to be necessary, in view of what you have said.

Mr. WILLIAMS. I think it would be well, Senator, if the committee feels sufficiently interested in the question, to again call the attention of the proper authorities to it, because in the rush of the many things which they have to attend to the question has perhaps not been fully considered.

Senator JONES. It seems to me that you have a canal there that you are going to have ready by next May, and you are going to let anybody use it free of charge, and if it is of any use to the Government the Government ought to make use of it.

Mr. WILLIAMS. Exactly.

Senator RANSDELL. Pardon me, but there are two members of the cabinet from New York who are very much interested in the subject. I know that Secretary Redfield is; he has just recently called that to the attention of the Director General of Railroads, who is also from New York. And the Chief of Engineers of the Army, Gen. Black, who is a very eminent engineer and also from New York, has recently talked to me about it; and he has thoroughly studied the subject.

Senator CALDER. I have called it to the attention of the Director General of Railroads and also to the attention of the Shipping Board.

Mr. WILLIAMS. The trouble is this: Some of those authorities feel that the canal ought to be equipped, either by the State of New York or by the citizens of the State of New York. I meant to explain to you why, in my judgment, that was not possible; I do not know whether I made myself clear as to that.

The CHAIRMAN. They think the canal ought to be equipped how?

Mr. WILLIAMS. Equipped with full equipments.

Senator NELSON. Will they also want you to load the barges? [Laughter.]

Mr. WILLIAMS. Well, I will not say as to that; I would not go that far.

Senator HARDING. Well, I hope you will underline your testimony where you say that New York built that canal at its own expense.

Mr. WILLIAMS. Thank you.

Senator HARDING. I rather think that will be rather wholesome in the testimony.

Senator BANKHEAD. I understood you to say a moment ago that you expected this canal to be opened some time next spring?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. When?

Mr. WILLIAMS. May 15. That is the opening of our navigation season.

Senator BANKHEAD. You are the engineer in charge of it?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. You know all about it, no doubt?

Mr. WILLIAMS. Yes, sir.

Senator BANKHEAD. What is your expectation? Do you believe it is going to be opened then?

Mr. WILLIAMS. Yes, sir; I believe we will do it; unless the authorities down here shut us off from coal and the little steel and cement that we need there in order to complete that work.

Senator BANKHEAD. Then, the completion depends upon contingencies?

Mr. WILLIAMS. Yes; but the settlement of them lies right here in Washington.

Senator BANKHEAD. When you say it will be completed next spring, do you mean that it is going to be completed for the uses of navigation according to your plan?

Mr. WILLIAMS. It will be completed——

Senator BANKHEAD (interposing). Do you mean that all the bridged spaces are going to be arranged—raised and widened—and that everything is going to be in complete condition for navigation next spring? Is that what you mean?

Mr. WILLIAMS. Yes, sir; I mean just that. There may be some bridges that will not be constructed. But that will interfere with highway traffic, and not with canal traffic.

Senator BANKHEAD. I am not talking about highway traffic; I am talking about canal traffic.

Mr. WILLIAMS. All the bridges that will span that canal will be of a height that will give 15½ feet——

Senator BANKHEAD (interposingly). Under the bridge?

Mr. WILLIAMS. Under each bridge.

Senator BANKHEAD. Now, you do not have reference to the terminals, or anything of that kind? They will be built for us in connection with the canal?

Mr. WILLIAMS. Yes, sir; except that they are in process of construction, and will not be completed by May 15; that will take a year.

Senator CALDER. This canal is now completed, so as to permit of navigation from the St. Lawrence River to the Hudson River?

Mr. WILLIAMS. It is completed so as to permit of navigation from Lake Ontario to the Hudson River.

Senator CALDER. So that the traffic can come from the Great Lakes to New York now by that route?

Mr. WILLIAMS. Yes. It was opened last fall, and we passed on 33 or 34 submarine chasers from the Great Lakes, which could not have gotten to the seaboard any other way except through that canal.

Senator CALDER. That is entirely complete for operations from Lake Ontario?

Mr. WILLIAMS. Yes, sir.

Senator RANSDELL. Did they come by way of the Oswego Canal?

Mr. WILLIAMS. Yes, sir.

The CHAIRMAN. Those suggestions which you mentioned, that New York complete the canal and also equip it, did not include having the equipment free, as well as the canal, did they? [Laughter.]

Mr. WILLIAMS. Well, sir, I am unable to say just how far they wanted us to go.

Senator JONES. I should think so.

Senator CALDER. Of course, you know that New York "pays the freight" anyhow; and so perhaps they think we may as well furnish the boats.

The CHAIRMAN. We are very much obliged to you, Mr. Williams, for your statement.

Mr. Stern has sent down the information that the committee requested from him on Tuesday last, when he was here. These papers are:

First. An option agreement from the Sloan Shipyards Corporation to the Clinchfield Navigation Co., dated March 31, 1917;

Second. A telegram from the Clinchfield Navigation Co. to the Sloan Shipyards Corporation, dated April 31, 1917;

Third. A telegram from Philip D. Sloan to the Clinchfield Navigation Co., dated May 1, 1917;

Fourth. A communication from the Sloan Shipyards Corporation to the Clinchfield Navigation Co., dated June 6, 1917; and

Fifth. A paper dated June 6, 1917, signed under the corporate seal of the Sloan Shipyards Corporation, and addressed to the Equitable Trust Co., New York City.

Senator NELSON. Is the option contract there?

The CHAIRMAN. Yes; the option contract is here; this is it. [Handing paper to Senator Nelson.]

Those are copies. Mr. Stern says that he can furnish us these as copies, and the originals of them he can furnish if we want them.

I suppose we can insert these in the record at this point, and if there is any question about the originals we can have them introduced later.

(The papers referred to by the chairman are here printed in full, as follows:)

SLOAN SHIPYARDS CORPORATION,
New York, March 31, 1917.

CLINCHFIELD NAVIGATION CO. (INC.),
24 Broad Street, New York City.

DEAR SIRS: We hereby offer to build you 12 wood cargo steamers, class 12-A-1* British Lloyds for ocean service 280 feet over all, 46 feet beam outside planking, 26 feet molded depth, to carry not less than 3,200 tons deadweight on a draft of 22 feet, to be delivered built and ready for sea, except only fuel, stores, and crew; speed 10 miles per hour loaded; said steamers to be constructed in accordance with plans and specifications for hull and engines prepared and furnished by your naval architect, Theodore E. Ferris, of New York City; steamers to be duplicates of those which we are now building for you under contract, and as to terms of payment, similar to those in your contracts for your four-motor ships, dated December 30, 1916.

Price $140 per dead-weight ton; first steamer to be delivered within 11 months, last steamer within 15 months from date of contract to be signed therefor.

This offer, unless accepted by you, shall expire May 1, 1917, at 12 o'clock noon.

Yours, very truly,

SLOAN SHIPYARDS CORPORATION,
By PHILIP D. SLOAN, *President.*

APRIL 30, 1917.

SLOAN SHIPYARDS CORPORATION,
522 Coleman Building, Seattle, Wash.

Pursuant to our telephone conversation with you at Chicago on Saturday. Contract is being submitted at Washington to-day for construction of 16 steamers. Telegraph us immediately extending option on steamers until May 10.

CLINCHFIELD NAVIGATION CO.

Charge Clinchfield Navigation Co.

[Telegram.]

OTHELLO, WASH., *May 1, 1917.*

CLINCHFIELD NAVIGATION CO.,
24 Broad Street, N. Y.

Option for steamers dated March 31 extended May 10.

PHILIP D. SLOAN.

SLOAN SHIPYARDS CORPORATION,
Seattle, Wash., June 6, 1917.

CLINCHFIELD NAVIGATION CO. (INC.),
24 Broad Street, New York, N. Y.

GENTLEMEN: Referring to the attached letter to the Equitable Trust Co. instructing them to pay you two sums aggregating $317,548, it is agreed and understood that the balance due you on the four steamers to be sold to the United States Shipping Board and Emergency Fleet Corporation, known as hulls Nos. 5, 6, 7, and 8, plus your 5 per cent commission and Mr. Ferris's one-half per cent fee on 12 steamers, is $579,852, which sum we agree to pay you in six installments of 13 per cent on each steamer as and when installments are paid to us by the United States Shipping Board under our contract; and when we forward you our vouchers on the United States Shipping Board for collection of the payments due as under our contract, we will send you our check for the installment due you.

Very truly, yours,

SLOAN SHIPYARDS CORPORATION,
By PHILIP D. SLOAN, *President.*

SLOAN SHIPYARDS CORPORATION,
Seattle, Wash., June 6, 1917.

EQUITABLE TRUST CO.,
New York, N. Y.

GENTLEMEN: Under contract dated May 18, 1917, between the Sloan Shipyards Corporation and the United States Shipping Board Emergency Fleet Corporation, covering the construction of 16 steamers, there will be deposited with your bank from time to time various sums of money by the United States Shipping Board to the credit of the Sloan Shipyards Corporation.

The first payment aggregating $862,400 will be paid you on or before June 18, 1917.

Out of the first payment you will please pay to the order of the Clinchfield Navigation Co. (Inc.) the sum of $235,774, and out of the second payment $81,774.

Very truly, yours,

[SEAL.] SLOAN SHIPYARDS CORPORATION,
By PHILIP D. SLOAN, *President.*

(Sloan Shipyards Corporation. Incorporated seal, March 27, 1917, Seattle, Wash.)

STATEMENT OF HON. ROBERT J. BULKLEY, CHAIRMAN OF THE LEGAL COMMITTEE OF THE WAR INDUSTRIES BOARD.

The CHAIRMAN (continuing). Mr. Bulkley, please state your name and present position.

Mr. BULKLEY. Robert J. Bulkley, chairman of the legal committee of the War Industries Board.

The CHAIRMAN. At one time, Mr. Bulkley, were you engaged by the Emergency Fleet Corporation?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. You were in their legal department?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. When was that?

Mr. BULKLEY. August 10 I began work there, and continued until the latter part of October.

The CHAIRMAN. Of 1917?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. During that time did you have to do with the contract between the Shipping Board Emergency Fleet Corporation and the American-International Corporation?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. Will you state, Mr. Bulkley, what you know about that contract and the negotiations in connection with it, and with whom you dealt?

Senator NELSON. Go back to the beginning and state the initiation of the negotiations.

Mr. BULKLEY. Well, the initiation of the negotiations was before I came on the scene at all. In the latter part of July Gen. Goethals went out as general manager of the Fleet Corporation and Admiral Capps went in, and within a few days after that change Admiral Capps telephoned for me to come over to his office and said that his legal department was about to resign, and asked me to organize a legal department for him.

I responded to that by enrolling the whole legal staff of the General Munitions Board, and everybody was assigned at both places for the emergency.

The negotiations had already begun for all three of those fabricated ship contracts. Admiral Capps handed me a draft of the proposed contract, which was complete, and asked for a criticism on it.

The CHAIRMAN. Had it been O. K'd by Gen. Goethals?

Mr. BULKLEY. I think not. I do not remember that I was told definitely whether it had been or not. But the contract as handed to me represented Admiral Capps's ideas, and I think was somewhat different from the line that Gen. Goethals had up with these people.

Our staff went over the contract as handed to us and submitted criticisms, which we reviewed with Admiral Capps, and then somewhat recast the contract, although it was his wish to change it just as little as possible.

Following that we took up negotiations with all three interests that were negotiating for fabricated ship contracts. We took them up first with the representative of the Merchant Shipbuilding Corporation.

The CHAIRMAN. Who were they?

Mr. BULKLEY. That was Mr. Robinson; I do not know what his initials were. Mr. Robinson was a graduate of Annapolis.

The CHAIRMAN. He is the president of that corporation, is he not?

Mr. BULKLEY. Of the Merchant Corporation; yes, sir. Their lawyers were Mr. Wallace, formerly with the Department of Justice here, and Mr. Elton Parks.

Senator NELSON. Is it a New York corporation?

Mr. BULKLEY. The Merchant Shipbuilding Corporation is a Delaware corporation, but the parties interested were, I think, practically all New York people.

Senator NELSON. But the corporation was organized under the laws of Delaware?

Mr. BULKLEY. Yes, sir. Then, about the same time, or within a few days after that, we met the representatives of the American International Co., and, still later, the representatives of the Submarine Boat Corporation. And the negotiations for all three of the contracts were proceeding simultaneously. I think we never had all three of them at one conference, but we exchanged views between the three.

The CHAIRMAN. Who represented the International Co. at those conferences and the negotiations?

Mr. BULKLEY. There was another Mr. Robinson representing the American International—of the Stone & Webster organization.

Senator NELSON. Stone & Webster; what connection did they have with the American International Co.?

Mr. BULKLEY. Well, they are part of the same general interest; there is some financial affiliation, the exact nature of which I do not know, but they are the same crowd of people in New York.

Senator NELSON. Were they shipbuilders?

Mr. BULKLEY. No, sir; I think not.

Senator NELSON. What were they; what was their business?

Mr. BULKLEY. The American-International Corporation?

Senator NELSON. No; Stone & Webster.

Mr. BULKLEY. Oh; Stone & Webster were engineers.

Senator NELSON. Engineers?

Mr. BULKLEY. Yes, sir.

Senator JOHNSON. They are builders, too, are they not?

Mr. BULKLEY. Yes, sir.

Senator JOHNSON. Well, who composed the American-International Corporation?

Mr. BULKLEY. The American-International is a very large corporation, with, I think, $50,000,000 capital.

The CHAIRMAN. Well, you did not finish stating who those people were. You got to Mr. Robinson, and then you were interrupted.

Mr. BULKLEY. Their lawyer was Mr. W. R. Begg.

The CHAIRMAN. Of New York?

Mr. BULKLEY. Of New York; yes, sir. It was with Mr. Robinson and Mr. Begg that we had all of the negotiations.

The CHAIRMAN. Yes. Then the Submarine Boat Corporation?

Mr. BULKLEY. The Submarine Boat Corporation was represented by Mr. Carse, the president of the corporation.

The CHAIRMAN. What was his full name?

Mr. BULKLEY. Henry R. Carse. And Mr. Sutphen.

Senator NELSON. Vice president?

Mr. BULKLEY. I think he is vice president; at any rate, he is a submarine expert.

Senator NELSON. Yes. He is the man that refused to give the plans to the Jahncke Co.?

Mr. BULKLEY. I do not recall about that. Their attorney was Mr. Stroock—Moses Stroock, of New York.

The CHAIRMAN. All right; you may proceed.

Mr. BULKLEY. I do not know just what line you want me to pursue, Mr. Chairman.

The CHAIRMAN. Well, taking the American-International, for instance: You had conferences with Mr. Robinson and Mr. Begg, representing the company; what actual negotiations did you have with them in connection with the contract?

Mr. BULKLEY. Well, those negotiations had reference to the form of the contract; they had agreed upon the basic cost and the general manner of computing fees before we came into the matter, and our work was getting the contract in final shape. We had considerable discussion with them about the relationship of the United States. We inserted in the contract that the contract was made by the Emergency Fleet Corporation acting for the United States of America. Some objection was made to that, but they agreed to it afterwards.

The CHAIRMAN. What particular points of the contract did you go over or take up with them? What modifications from the original were committed to you?

Mr. BULKLEY. Well, I do not recall now any more important modification than the one I have just mentioned and fixing the title to the ships. We provided that the title to the ships as they were constructed should be in the United States. We had to work out a great deal of detail about the computation of the basic cost and the fee, and, in general, there were many details that had to be discussed. I have not thought about the matter for so long that I am not sure I can mention everything that was discussed now.

I would like, if the committee would care for it, to have a chance to go over the memorandum that we have made, if there is a copy still in existence, and write the committee a memorandum on the subject of the points that we criticized in the contract as it was

originally handed to us. I can do that if it would be of interest to the committee.

Senator JOHNSON. Do you remember whether there was any discussion concerning the payment of $9 per ton, or the payment of any particular sum, for the fabrication of the ships in the yard?

Mr. BULKLEY. Do you mean for the fee of the International Corporation?

Senator JOHNSON. Yes.

Mr. BULKLEY. It was not discussed in that way. I think the amount per ton was not mentioned. We discussed the total amount of the fee. The normal fee was agreed upon as 5 per cent of the estimated cost of the work. Then the contractors were to share in any saving that they might make under the estimated cost and they were to stand part of the expense, if any, above the estimated cost, but within certain limits, however. There was a minimum fee fixed which they were to get at all events.

Senator JOHNSON. Do you recall that Admiral Capps and you gentlemen working in conjunction with him reduced the fee to 5 per cent?

Mr. BULKLEY. I was told that there was a reduction as against what was proposed before.

Senator JOHNSON. The original fee had not been fully agreed upon, but the fee tentatively suggested was $9, was it not?

Mr. BULKLEY. I am not sure. I was told by Admiral Capps that he had reduced it, but I do not recall how much.

Senator JOHNSON. Do you recall any discussion at the time as to the amount of work that was to be done in the shipyard and the amount outside?

Mr. BULKLEY. No; I do not.

Senator JOHNSON. For instance, if I may make myself plain, the fee allowed was 5 per cent upon the total cost of the ships?

Mr. BULKLEY. The estimated cost.

Senator JOHNSON. The estimated cost of the ships; outside of the shipyard, in the various institutions that prepared the fabricated parts, a very large percentage of the work was done?

Mr. BULKLEY. Oh, yes; there is no question about that. What you mean is the materials coming into the plant?

Senator JOHNSON. Yes. Now, do you recall, in the discussion whether the question arose as to whether 5 per cent should be paid upon the total cost, or should be paid only upon that portion of the work done within the shipyard?

Mr. BULKLEY. No; the fee was not computed as a percentage on the actual cost; the operation was to take 5 per cent of the estimated cost.

Senator JOHNSON. Yes.

Mr. BULKLEY (continuing). And then write that amount into the contract as a fixed amount, which is called in the contract the normal fee, and then that was subject to being augmented or diminished, by bonuses or penalties for excess of cost, or for savings, or for speed or delay in the delivery of the vessels.

Senator JOHNSON. But your estimated cost was based upon the entire cost of the ships, was it?

Mr. BULKLEY. Yes, sir.

Senator JOHNSON. Now, the larger proportion of the work or the larger proportion of the cost arose outside of the shipyard, did it not?

Mr. BULKLEY. I am not sure about that. I think perhaps the schedule would show how much was material and how much was labor.

Senator JOHNSON. At any rate, was that the subject matter of discussion among you gentlemen?

Mr. BULKLEY. Oh, it was not very much discussed; it was understood that the cost was the entire cost; there is no question about that—including materials. I can give you here the estimated basis cost; it is subdivided here in this schedule [indicating paper in Mr. Bulkley's hand] into material delivered at the yard, $570,000 per vessel; direct labor, $275,000 per vessel; and overhead, $255,000. So that, approximately, one-half of the cost, a trifle over one-half, is in materials delivered at the yard.

Senator JOHNSON. Yes; but the 5 per cent was upon the total cost?

Mr. BULKLEY. Total; yes, sir.

Senator JOHNSON. Those materials that were paid for outside and would be shipped to the yard they received their 5 per cent upon just exactly as they received their 5 per cent upon what was done in the yard?

Mr. BULKLEY. With the qualification that it is not figured in that way; it would amount to the same thing, however; yes, sir.

Senator JOHNSON. Well, with the qualification that it was estimated instead of actual?

Mr. BULKLEY. Yes, sir; that is correct.

Senator JOHNSON. Now, was there any suggestion or any talk of any kind as to a limit on estimated cost?

Mr. BULKLEY. Well, the estimated cost was agreed upon before we came into the matter at all, and, as I recall, it was not changed after that.

Senator JOHNSON. You dealt, you say, with the attorney, Mr. Begg, I believe you said it was?

Mr. BULKLEY. Yes, sir.

Senator JOHNSON. And with the president of the corporation, or one of the officers of the corporation—a Mr. Robinson?

Mr. BULKLEY. Yes, sir.

Senator JOHNSON. Were there any other individuals in any capacity whatsoever representing, or pretending to represent, the American-International Corporation present at any of the conferences that were held with you gentlemen?

Mr. BULKLEY. Yes, sir. Their engineer, Mr. Connick, I think his name was.

Senator JOHNSON. Mr. Connick?

Mr. BULKLEY. Yes, sir. He was present at one or two of the earlier conferences, but did not say much or take any important part.

Senator JOHNSON. Were there any others?

Mr. BULKLEY. Then, at the end, Mr. Stone, the president of the corporation, was present at one or two of the last conferences and was present to sign the contract. That is all, I remember.

Senator JOHNSON. Did you realize that the contract was signed by any others than Mr. Stone, as the president, and by the secretary?

The reason I ask you that, I will say to you, is that I see the contract is countersigned by Mr. Vanderlip as one of the directors.

Mr. BULKLEY. Yes. That was the general rule of the Fleet Corporation that was adopted by our predecessors which we did not change, that one director should sign all contracts. Then, of course, we had the contract ratified by the board of directors.

Senator JOHNSON. Did you deal at all with Mr. Vanderlip during the progress of those negotiations?

Mr. BULKLEY. No, sir; I never saw him.

Senator JOHNSON. Have you mentioned all of the parties that you came in contact with in dealing with this matter?

Mr. BULKLEY. That is all I remember. [After a pause.] Oh, yes; Mr. Rogers, of the Stone & Webster organization, was in on one or two conferences, but took no important part.

Senator JOHNSON. Are you familiar with the various corporations out of which came the American-International Corporation?

Mr. BULKLEY. No, sir; I am not.

Senator JOHNSON. All right. Mr. Chairman, that is all.

The CHAIRMAN. Mr. Bulkley, was this a new corporation just recently formed—or do you know when it was incorporated?

Mr. BULKLEY. I do not, exactly; I think it is rather a new corporation, however.

The CHAIRMAN. You say the capital stock was how much?

Mr. BULKLEY. I think $50,000.000.. I believe we have a certificate of their incorporation here [indicating].

Senator NELSON. No; it was another company that had $50,000,000 capital; not this company.

Mr. BULKLEY. I intended it to refer to this company. I do not recall exactly.

The CHAIRMAN. Did you have to do with the question of the land down there, the title to the land at Hog Island, and examining into that, or as to what were the terms and the price?

Mr. BULKLEY. There was a question down there whether the land was worth the price at which it was optioned to the American-International Corporation. We had the title examined and passed upon by a title insurance company in Philadelphia; but we made a very considerable investigation as to the value of the land, because that had been criticized; and Admiral Capps got the owner to come down here and tried to get him to reduce the price, but he was unsuccessful.

And we came to the conclusion that the option price was somewhat more than the land was worth; that is to say, it was not outrageously more; it was what you might call a liberal top price. But we felt that inasmuch as the Fleet Corporation had no authority to condemn the land, it would be better to accept the price as it was fixed in the option and let the work go ahead than to delay any more in trying to modify it.

The CHAIRMAN. Did the Fleet Corporation get the title to the land? Was it conveyed to the Fleet Corporation?

Mr. BULKLEY. No; it was bought by the American-International Co. and paid for by them. The Fleet Corporation has an option to buy it at the termination of the contract; but inasmuch as the Fleet Corporation was paying for the construction of the shipyard, which is worth many times the value of the land, it would seem to be the

only possible good business policy to buy the land at the end of the contract; and for that reason we regarded it as an expense of the Fleet Corporation. The Fleet Corporation pays rental for it, too, at the rate of 6 per cent per annum on the actual amount invested.

The CHAIRMAN. Do you remember what that price was that was fixed?

Mr. BULKLEY. One million, seven hundred and some thousand dollars. It is in here somewhere [indicating paper in Mr. Bulkley's hand].

Senator NELSON. That is what the company paid for the land?

Mr. BULKLEY. Yes, sir.

Senator NELSON. And they are getting rental on that?

Mr. BULKLEY. Yes, sir. The exact figures are $1,706,000.

Senator NELSON. And they are to have 6 per cent rental on that?

Mr. BULKLEY. Yes, sir.

Senator NELSON. And from the beginning?

Mr. BULKLEY. Yes, sir; from the time they——

Senator NELSON (interposing). That is, in addition to their other profits?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. Do you remember the number of acres in it?

Mr. BULKLEY. Eight hundred and forty-six acres.

Senator NELSON. Have you visited the site?

Mr. BULKLEY. No, sir.

Senator NELSON. It is on an island, is it not?

Mr. BULKLEY. It was an island, but is now attached to the shore: as I understand, part of it was under water at that time.

Senator NELSON. The whole ground was under water, was it not?

Mr. BULKLEY. Not all of it.

Senator NELSON. Pretty much all of it?

Mr. BULKLEY. I would not say that: a little of it.

Senator NELSON. Well, at high tide it was?

Mr. BULKLEY. Well, I really do not know, but I think not a large proportion of it.

Senator NELSON. Now, this company invested no capital in building the yard in the first instance, did it?

Mr. BULKLEY. No, sir.

Senator NELSON. Nor in improving the site: that was all done by the Government, was it not?

Mr. BULKLEY. Yes, sir.

Senator NELSON. And in addition to that, the Government took over the employees of this company, did it not—some of their officials and office force?

Mr. BULKLEY. No: not directly: the Government was to pay for the cost of doing the work, including a large part of the office force. I can give you that accurately by referring to some papers.

Senator NELSON. Well, the Government was to pay for the office force, was it not—or a portion of it?

Mr. BULKLEY. Yes, sir.

Senator NELSON. Well, what was that office force to do? Was it to remain at New York, the headquarters office?

Mr. BULKLEY. Well, the Government does not pay anything for the New York office; it only pays for work in the yard and Philadelphia office.

Senator NELSON. Well, those people that the Government was to pay the salaries of, were they to be at the yard?

Mr. BULKLEY. They were to be either at the yard or the Philadelphia office, yes; devoted exclusively to this work; the Government does not pay any part of the salary of anybody who is not exclusively employed on this work.

Senator NELSON. Now, you say the Government was to have an option on getting this land at the end of the scheme?

Mr. BULKLEY. Yes, sir.

Senator NELSON. Was anything agreed as to the price?

Mr. BULKLEY. Yes, sir; the same price——

Senator NELSON (interposing). At the same price as that which the company pays?

Mr. BULKLEY. Yes, sir.

Senator NELSON. In the meantime the company gets 6 per cent on it?

Mr. BULKLEY. Yes, sir.

Senator NELSON. Now, this corporation is a New York corporation?

Mr. BULKLEY. Yes, sir.

Senator NELSON. Was not this corporation formed just for the purpose of taking on this contract?

Mr. BULKLEY. No; I do not think so.

Senator NELSON. It had existed before?

Mr. BULKLEY. I understand so. I know they are building water systems down in Uruguay and railroads in China and a number of other enterprises.

Senator NELSON. Well, had they any shipbuilding yard in this country?

Mr. BULKLEY. I do not think they had any shipbuilding yard at all. But they are connected with the New York Shipbuilding Co.; I do not know how closely. But they draw employees back and forth, and they have the benefit of some shipbuilding experience of the New York Shipbuilding Co.

Senator NELSON. Well, then, this was a company engaged in exploiting railroads and other things down in South America?

Mr. BULKLEY. Well, I do not know that they are limited to South America.

Senator NELSON. Well, for the whole world, then?

Mr. BULKLEY. Yes, sir.

Senator NELSON. But they had never engaged in shipbuilding before?

Mr. BULKLEY. The American International, strictly speaking, have not; but, as I say, they have a close affiliation with the New York Shipbuilding Co.

Senator NELSON. What do you mean by "affiliation"?

Mr. BULKLEY. Simply that——

Senator NELSON (interposing). Do you mean the New York Shipbuilding Co. owns some of the stock in the American International?

Mr. BULKLEY. I do not know about the stock ownership, but I know that they have arrangements, either by a stock ownership or by friendly agreements, by which they can draw on employees of the New York Shipbuilding Co. and get the benefit of the experience there.

nator NELSON. Yes. Now, they do not invest anything in the ling of this yard?
r. BULKLEY. No, sir.
nator NELSON. Their only investment is in the land?
r. BULKLEY. Yes, sir.
nator NELSON. And they get all the money that they need to l the yard with and equip it, do they not?
r. BULKLEY. Deposited in a trustee account in advance.
nator NELSON. Then, how many ships are they to build?
r. BULKLEY. Under the original contract, 50; and there is a sup- ental contract for 70 more.
nator NELSON. At what price?
r. BULKLEY. Do you want the estimated cost per vessel?
nator NELSON. Yes.
r. BULKLEY. About $1,100,000.
nator NELSON. What was the tonnage of the ships?
r. BULKLEY. Seven thousand five hundred tons dead-weight city.
e CHAIRMAN. They were steel ships?
r. BULKLEY. Yes, sir.
nator NELSON. Have you the correspondence and documents in office pertaining to this deal here with you now?
r. BULKLEY. Well, I called for the files from the Emergency t Corporation when I was advised that I was to come before the nittee; and I am not sure whether they have given me the com- files or not. It is no longer my office, you know.
nator NELSON. Well, have you it with you?
r. BULKLEY. What they sent me is here [indicating].
nator NELSON. Well, will you take it up and call our attention hat is there?
r. BULKLEY. Yes, sir. This [indicating] is the Merchant Ship- ling Corporation file.
nator NELSON. Well, as to the Merchant Shipbuilding Corpora-

e CHAIRMAN. I suggest that it would cause confusion to switch rom the other company.
. BULKLEY. Well, the Senator asked for all the files that I have

e CHAIRMAN. I suppose he meant the American International

nator NELSON. Yes; I want everything pertaining to this con- ; the first date that appears in your files referring to it.
. BULKLEY. Here [indicating] is a file entitled "American- national Shipbuilding Corporation—General—Contract."
d here is a file entitled "American Shipbuilding Corporation— ral—Formation of new corporation to take over contract 83 SC American International Corporation."
ator NELSON. Well, turn over there [indicating] and read papers, and tell us what is in them.
. BULKLEY. Well, this first one——
ator NELSON (interposing). No; that last one [indicating].
ator VARDAMAN. If I may interrupt, I wish to ask a question in ction with the one that was asked by Senator Nelson a few

moments ago. Was there anything on that Hog Island land that this company got when they got control of it?

Mr. BULKLEY. I do not understand the question.

Senator VARDAMAN. Have you any evidence as to what that land cost this company when they bought it?

Mr. BULKLEY. Oh, yes; that is distinctly stated—$1,706,000.

Senator VARDAMAN. That is what they paid for it?

Mr. BULKLEY. Yes, sir.

Senator HARDING. Is that stated in the papers?

Mr. BULKLEY. Yes, sir.

Senator VARDAMAN. And they are selling it to the Government at the same price that they paid for it?

Mr. BULKLEY. Yes, sir. They have given the Government an option on it; the Government is not obliged to buy it.

Senator VARDAMAN. At the same price that they paid for it?

Mr. BULKLEY. Yes, sir.

Senator JONES. Did any of those people interested in that company have any interest in this land when the company bought it?

Mr. BULKLEY. No, sir.

Senator JONES. Do the records show that?

Mr. BULKLEY. The record shows the owners, and I am confident that they were not in any way connected with the American International Corporation.

The CHAIRMAN. Are you satisfied that this figure, $1,706,000, was just what it cost the American International Corporation?

Mr. BULKLEY. I do not think there can be any doubt about that. They had an option at that price, and they themselves thought it was too high. They told us that, but they said it was the only available shipyard site; and they took the option at such price as they could get it at.

Senator VARDAMAN. That was about 800 acres, was it?

Mr. BULKLEY. Eight hundred and forty-six acres.

Senator VARDAMAN. And most of it was covered with salt water?

Mr. BULKLEY. No. There was a little of it under water. It is rather marshy ground. I never saw it, however.

Senator VARDAMAN. I understand the whole plant is built on piles, is it not?

Mr. BULKLEY. There is a good deal of piling there; I could not say whether the plant is built on that.

Senator NELSON. I understand there are to be 25,000 piles built there.

Mr. BULKLEY. I do not know about that.

Senator NELSON. That is in this report [indicating]. Now, what I wanted was to have you give us the data and the correspondence that preceded the signing of this contract, that you have in the files there.

Mr. BULKLEY. Well, of course, the correspondence will not show a great deal of what went on, because most of it was done in conference.

Senator NELSON. Well, it may show when the thing was initiated.

Mr. BULKLEY. I do not know that they sent me the files as early as that. Now, the first date that I see in here [indicating papers in Mr. Bulkley's hands] is July 13, 1917; and I am confident that the negotiations had begun before that.

Senator NELSON. The contract was not signed until the 13th of September, was it?

Mr. BULKLEY. That is correct.

Senator NELSON. Now, what is that first paper? You indicated it; but tell us what it is about.

Mr. BULKLEY. I do not know what it is about; I do not know that I ever saw it before; it happened before I was with the Fleet Corporation.

Senator NELSON. Whom is it signed by?

Mr. BULKLEY. It is not signed at all; it is a carbon copy and it is not signed. It apparently comes from the American International Corporation, and reads as follows:

At your request we have planned the erection of a shipyard at Hog Island near Philadelphia on land which we now hold under option and agree to rent to you at 6 per cent net per annum on its cost. The plant (aside from the land) is to be paid for and owned by you. The plant is designed for the construction within 24 months of two hundred 7,500 deadweight ton steel fabricated ships.

We will undertake, as Government agents, to the best of our endeavors, to design and build such shipyard and to construct, within 24 months, two hundred 7,500 deadweight ton steel fabricated ships, in accordance with detailed plans and specifications to be furnished by you. It is our understanding that we are to have entire charge of the work but are to be free to call on you and through you on the Government for such cooperation as may be necessary to make it a success. We expect to have to do this, for without Government cooperation in the purchase of materials and transportation, the work can not be successfully done. For this work we will furnish, at our own expense, the services of that portion of the organization required which is outlined in the attached schedule——

Senator NELSON (interposing). Wait a minute. They say at their own expense they will furnish the organization and yet you provided for paying for it in the contract that was ultimately made?

Mr. BULKLEY. May I give you exactly what the contract does provide? My colleague here calls my attention to the fact that I made a slight misstatement regarding that, and I would like to put in the exact language of it.

Senator NELSON. You can put that in.

Mr. BULKLEY. The exact language about that is this: This is the schedule of what the overhead expenses shall include, and among other things it says [reading]:

(d) Subject to the rules hereinafter stated, transportation of laborers and/or employees, salaries and expenses of the agent's general manager, purchasing and traffic agencies, engineering and drafting forces and accounting and clerical forces employed and maintained by the agent at its offices in Philadelphia and at the shipyard exclusively on the work hereunder, and an equitable proportion of salaries and expenses of other similar agencies and forces employed and maintained by the agent at said offices or elsewhere; but the agent's fee herein provided for shall cover the services of its executive officers, who for the purposes of this contract shall be deemed to include its president, its board of directors, vice presidents, treasurer, and secretary, and their respective assistants not immediately attached to the shipyard, and their salaries and emoluments shall not be chargeable to the work under this contract.

To continue with the letter of July 13:

For this work we will furnish at our own expense the services of that portion of the organization required, which is outlined in the attached schedule, and will give the experience and services, in a consulting and advisory capacity, of the corporate organization of the American International Corporation, Stone & Webster, and the executive officers of their division of construction and engineering, and the executive officers and engineering staff of the New York

Shipbuilding Corporation. All obligations entered into by us are to be subject to your approval, and are to be paid for with your money.

A work of this magnitude requires the complete building of a yard upon an unprecedented scale, and the cost of that yard will be an addition to the usual cost of building in small volume in existing yards; for the total tonnage under consideration we estimate that $14 per dead-weight ton will approximately cover the cost of the yard. On that basis and guided by the experience of commercial shipbuilding costs, with labor at an average price of 55 cents per hour and with steel at $50 a short ton, it is estimated that these boats will cost approximately $150 per dead-weight ton, exclusive of fee and cost of yards.

As compensation for our services we are to receive a fee (payable as the work progresses) computed as follows: If the total structural cost (exclusive of fee and exclusive of yard cost) is more than $150 per ton and less than $165, then the fee shall be $10 per dead-weight ton; if such computed cost shall be more than $165 per ton, but less than $175 per ton, such fee shall be $9 per dead-weight ton; if the computed cost shall be more than $175, the fee shall be $8 per dead-weight ton; if such cost shall be less than $150 per ton, then the fee shall be $10 per dead-weight ton plus one-half of the amount by which $150 exceeds such cost. Our fee shall also be increased for each ton of constructed ship $1.66⅔ for each—

It says, "5 days," but there is a cross over the "5" and a cross over the "s," so it would read:

For each day that any ship is launched in advance of the date fixed on the schedule attached.

The estimated structural cost per ton is based on the estimated cost of steel (plates and shapes) of $50 per short ton and the wage schedule attached. The computation and basis of compensation is not to be affected by any change in the price of steel and wages; that is to say, if the measure price of $150 per ton is increased through increased wage schedule or increased material cost, such increase will not cause a reduction in our fee.

What we are proposing to you is a straight agency contract, so that if at any time you should become dissatisfied with the services which are being rendered or should wish to discontinue the work, you are at liberty to terminate our employment on 10 days' notice in writing. In that case the compensation for our services shall be in proportion to work performed; and if not agreed upon between us, shall be determined by arbitration, one arbitrator to be appointed by you, one by us, and the third to be selected by the then president of the American Society of Civil Engineers.

As part of this arrangement we are to have an option, executed concurrently herewith, to purchase the property of the Government on our land at a valuation determined by arbitration in the same manner.

Senator NELSON. That is, they were to have the option of purchasing the yard from the Government?

Mr. BULKLEY. Yes, sir.

Senator NELSON. Was that made a part of the contract?

Mr. BULKLEY. Yes, sir; they have an option, subject to the Government's prior option.

Senator NELSON. Subject to the Government's prior option to buy the land?

Mr. BULKLEY. To buy the land; yes, sir. But if the Government does not buy the land, then they have an option to buy the plant.

Senator NELSON. Is the option price put in there?

Mr. BULKLEY. A cost to be computed. I can give you the exact provision. I think that would be better than to give you my recollection.

The CHAIRMAN. What you have been reading seems to have been a proposal on their part.

Mr. BULKLEY. Yes, sir.

Senator JOHNSON. Suppose neither exercised the option; what situation would result, Mr. Bulkley?

Mr. BULKLEY. I have that right here [reading]:

Should neither the owner nor the agent exercise their respective options to purchase the property of the other, or should either the owner or the agent elect to purchase the property of the other, but fail to pay the purchase price therefor within said period of 30 days, or as soon after such period of 30 days as the deed herein shall have been tendered, then and in either of said events, the owner shall forthwith remove from the "real estate" all of the buildings, building slips, camp, commissary, hospital, plant, appurtnances and parts, materials, supplies, and scrap the property of the owner and readily removable, and thereupon the owner shall have no further title to or interest in said "real estate" belonging to the agent, or to or in said shipyard.

Senator NELSON. What I wanted to know was the price of the Government option on the plant.

Mr. BULKLEY. Yes, sir; I was going to get to that. It is not expressed in dollars. I will give you the computation in a second.

Senator JOHNSON. Let me ask you this, just as a matter of personal information, perhaps it involves something of a legal equation. If neither option were exercised, of course the piling in the shipyards, being incapable of removal, all of the shipyard would revert to the owners of the property, would it not?

Mr. BULKLEY. Everything that the Government does not remove. The Fleet Corporation would be required to remove what was readily removable. I remember the insertion of those words "readily removable," because Admiral Capps was afraid he might be putting himself in the position of being obligated to pull up piling, which would be far more costly than it would be worth.

Senator VARDAMAN. Really is there anything of value to amount to anything to be removed?

Mr. BULKLEY. Oh, I think there might be a good deal. I am not enough of a shipbuilding expert to know just what it would be, but there are considerable structures there.

Senator VARDAMAN. Do you know what it would cost to put those piles in there?

Mr. BULKLEY. No, sir; I have no idea.

Senator JONES. We have a statement.

Senator JOHNSON. Yes; it is in the report of Mr. Piez yesterday.

Mr. BULKLEY. There is a provision here for appraisal as to the value of the plant [reading]:

Options.—If upon the completion of the work hereunder the owner shall have ordered 100 or more additional vessels under this article, then and in that event the options hereinafter expressed in this article shall become effective. In such event the owner shall, not less than 60 days before the completion of the work hereunder, appoint an appraiser, and the agent shall likewise appoint an appraiser within 5 days after written notice of the appointment of such appraiser by the owner, and the two appraisers so chosen shall select a third. If either party shall fail to appoint an appraiser as aforesaid, the other party may select a second appraiser, and the two so selected shall choose a third as aforesaid. The three appraisers so appointed shall appraise the value of the buildings, building slips, camp, commissary, hospital, plant, appurtenances, the property of the owner, as shown by the last preceding annual and inventory kept by the agent as herein provided, for the fiscal year, and also of parts, materials, supplies, and scrap purchased for the work on the vessels, but not incorporated or to be incorporated in vessels or otherwise disposed of under this contract.

The appraisers shall take into consideration in the appraisal such as shown by the inventory which shall be furnished them, the conditions as regards wear and tear and depreciation, the desirability of the plant for use for ship building, commissary, hospital, plant, and appurtenances for the purpose of a shipyard.

their replacement value at market prices at the time of the appraisal, and the condition of the shipbuilding business generally with reference to the going value of a constituted shipyard at the time of the appraisal. The appraisers shall complete their appraisal and deliver one copy thereof to the owner and one to the agent within 30 days after their appointment.

Senator NELSON. That is the basis of the Government option?

Mr. BULKLEY. Yes, sir.

Senator NELSON. What is the date of this proposal that you read?

Mr. BULKLEY. It is dated July 13. To finish reading it, it says:

This option to continue for a period of 18 months from date, whether or not we remain agents during all of that period. In case we do not exercise the option, we are to give you an option to take over from us the land purchased at its then complete cost to us, such purchase option to be exercised within 30 days if we decline to purchase your property at the arbitrated figure.

Senator NELSON. That was dated July 13. Whom was it signed by?

Mr. BULKLEY. This is a copy, and is not signed at all.

Senator NELSON. Can you supply the signature when these notes are submitted to you?

Mr. BULKLEY. I can inquire at the Fleet Corporation. You understand, Senator, I am not there any longer.

Senator JOHNSON. Mr. Chairman, might I very respectfully make a suggestion? As I understand it, this gentleman was brought in there as a temporary attorney. He has no personal knowledge of this situation, and if we are going into an investigation of the Hog Island contract, which I profoundly hope we will, why not call all of the signers of the contract and all of the men who actually negotiated it and go through it thoroughly? Of necessity, the knowledge of this particular witness is derived solely from documents with which personally he is not familiar.

Mr. BULKLEY. I want to say, Senator, that I never even saw before the document that I just read to you.

Senator JOHNSON. I have been asuming that, sir.

Mr. BULKLEY. At the same time, I do know more about the negotiations at a certain stage leading up to the signing of the contract than some of the signers themselves. For instance, Mr. Hurley was not able to give it a great deal of personal attention, and Mr. Stone, as I have stated, was only present at one or two conferences. I do not know whether Mr. Vanderlip even read the contract; he was a signer of it. But the negotiation was carried on by Mr. Robinson and Mr. Begg for the American International, and after the 10th of August by my colleagues and myself of the legal department, and Admiral Capps representing the Fleet Corporation.

Senator JOHNSON. Well, Mr. Bulkley, who investigated the individuals who were connected with the American International? Somebody in the Fleet Corporation must have done so.

Mr. BULKLEY. It seems to me that so far as an investigation was made it must have been made by Mr. Fuller, but I am not sure about that. We entered upon it with the presumption that the individuals were men of character and ability.

Senator JOHNSON. Yes: that is a presumption that, at this stage of the inquiry, of course, none will question in the slightest degree. But who can tell who were the individuals who composed this particular corporation? Who can tell who are the interlocking corporations out of which it came? And who can tell who were the individ-

hat are dealing now for the American International Corpora-

. BULKLEY. I can not give you that now, but I can supply a
f the directors of the American International. I presume that
lling some of them you can find out what interlocking interests
are.

ator JOHNSON. The suggestion I was making was merely in the
st of saving time.

BULKLEY. I think, Senator, your suggestion is quite in order.
; seems to me that as to anything that happened before August
u had better call somebody else; but I am perfectly willing to
r any questions as to what happened after August 10.

ator JOHNSON. Have you the complete files as to this particular
ction? Are the complete files there before you now?

BULKLEY. I am not certain, Senator. I asked them to send me
mplete files, but I am not certain just what they sent me.

ator JOHNSON. Perhaps it might be just as well to proceed.
n me, Senator Nelson, for interrupting.

ator NELSON. Perhaps you had better leave the files here, and
n look them over afterwards.

ator JOHNSON. They might not wish to leave the original files.

ator NELSON. Are these the original copies?

BULKLEY. They are the original files. Of course, in the files
are a number of copies.

ator JOHNSON. You stated to me that that original proposal
ated July 13. What have you next in line there?

BULKLEY. The next is an unsigned memorandum, headed
matter underlined."

ator JOHNSON. That is a memorandum from whom to whom?

BULKLEY. It is unsigned, and I never saw it before.

ator NELSON. What date is it?

BULKLEY. It is not dated.

ator NELSON. Just give us the beginning of it and let us see
it is.

BULKLEY (reading):

y request, you have [illegible]
dipyard at *Hog Island*, [illegible]
ou are ready to [illegible]
Corporation at 6 per cent of its [illegible]
work covered by this [illegible]
r and owned by the [illegible]
will undertake, as agents [illegible]
d such shipyard and [illegible]
ndred (200) [illegible]
lans and specifications [illegible]
ention that you are [illegible]
recognize that you [illegible]
ition, on the Government [illegible]
transportation. [illegible]
vices of that [illegible]

ator NELSON. [illegible] What
next document?

BULKLEY. The next [illegible]
I would not be [illegible]

ator NELSON. Go on [illegible]

BULKLEY. The next [illegible] I
on dated July 21, and [illegible] sign

George W. Goethals, general manager, addressed to Mr. William Denman.

Senator JOHNSON. Read it, please.

Mr. BULKLEY (reading):

DEAR SIR: I now inclose draft of suggested contract which you asked for. As indicated, the new matter not in the prior draft is underlined.

The CHAIRMAN. That would appear to accompany the memorandum you just referred to.

Mr. BULKLEY. Yes, sir.

Senator NELSON. What is the next?

Mr. BULKLEY. The next is dated July 25. It says [reading]:

Memorandum: Received from Mr. Cotton with his memorandum dated July 25, 1917, file No. 173-3, relative to fabricated steel ship project.

Senator NELSON. Who was Mr. Cotton?

Mr. BULKLEY. Mr. Cotton was counsel for the corporation under Gen. Goethals.

Senator NELSON. For the Shipbuilding Corporation?

Mr. BULKLEY. Yes, sir; for the Emergency Fleet Corporation.

Senator NELSON. He is not with it any more?

Mr. BULKLEY. No, sir; he withdrew shortly after Gen. Goethals left. That says:

Contract with American International Shipbuilding Corporation.

Here is a telegram dated August 4, 1917, addressed to Charles A. Stone, president, American International Corporation, 120 Broadway, New York City, and signed "Capps." It reads:

Referring proposal to build fabricated ships, can you arrange to meet me at office Emergency Fleet Corporation, Washington, Monday morning, 10 o'clock or afternoon, 3 o'clock, if more convenient? Please bring all necessary data to complete understanding of the proposition, including schedule of estimates labor, and material.

Senator JOHNSON. This was about the time you came into the matter?

Mr. BULKLEY. About a week before; yes, sir.

The CHAIRMAN. If you want to find out the officers and directors of the American International, Mr. Stone would be the man to call I should think.

Senator JOHNSON. Probably; yes.

Senator NELSON. What is next on your file?

Mr. BULKLEY. The next is a carbon of a letter dated August 6, 1917, addressed to Mr. George J. Baldwin, vice president, American International Corporation, New Willard Hotel, Washington, D. C. It is unsigned, but bears Admiral Capps's initials. It is two pages; do you care to hear it?

Senator NELSON. You might begin it and let us hear what it is about.

Mr. BULKLEY. The subject heading is "Type contract." [Reading:]

DEAR SIR: The completion of the type contract which covers the class of contracts I was discussing with you this morning has been delayed more than I expected, so that I shall not be able to give it to you to-night.

Senator NELSON. I do not think you need go any further with that.

Senator JOHNSON. Who is Mr. Baldwin?

The CHAIRMAN. Mr. Baldwin was the vice president, and apparently took the matter up instead of Mr. Stone.

Mr. BULKLEY. It would seem so; I know nothing about that.

The next is a memorandum dated August 18, 1917, entitled "Memorandum concerning changes to be made in base contract of Merchant Shipbuilding Corporation to meet requirements of contracts with American International Corporation and Submarine Boat Corporation." This is unsigned, but I remember this; this is a memorandum which Admiral Capps handed to me, because we took up the matter of a contract with the Merchant Shipbuilding Corporation first, and then he handed me this memorandum to show what changes should be made to adapt it to the circumstances of these other two companies.

Senator NELSON. What comes next?

The CHAIRMAN. Were all three of these contracts based on the same principle, Mr. Bulkley?

Mr. BULKLEY. The same principle; yes, sir.

The CHAIRMAN. Did they vary much in detail?

Mr. BULKLEY. Not a great deal.

The CHAIRMAN. They are the agency contracts?

Mr. BULKLEY. Yes, sir.

Senator NELSON. These other two cases, too?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. In each case the agent gets the same amount of fee?

Mr. BULKLEY. It is computed the same way. The size of the vessels was different, and therefore the estimated cost was different.

The CHAIRMAN. But it was the same 5 per cent, was it not?

Mr. BULKLEY. Yes, sir; 5 per cent on the estimated cost was then written into the contract as a fixed fee.

The CHAIRMAN. Was that true as to each of them—the Merchants', the Submarine, and the American International?

Mr. BULKLEY. Yes, sir. The Merchants' Corporation bought some land up at Bristol, and the Submarine Boat had made a lease of water frontage that was owned by the city of Newark, and we changed that and made the lease directly to the Emergency Fleet Corporation.

Senator NELSON. That was the Merchants' Shipbuilding Corporation?

Mr. BULKLEY. The Submarine Boat.

Senator NELSON. They are at Newark?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. Were there many complications with the Merchants' about their land?

Mr. BULKLEY. No; there were some very minor defects of title.

The CHAIRMAN. What I am getting at is this. Did you have the same sort of arrangement as at Hog Island?

Mr. BULKLEY. Yes, sir; the same arrangement.

The CHAIRMAN. The Emergency Fleet Corporation had the right to pay for the land?

Mr. BULKLEY. Yes, sir; exactly the same.

Senator CALDER. But, in the case of the Merchants' Corporation, they own the land?

Mr. BULKLEY. Yes, sir.

Senator CALDER. But the Submarine Boat does not?

Mr. BULKLEY. The Submarine Boat does not.

Senator CALDER. You took a lease on that, I think?

Mr. BULKLEY. Direct from the city of Newark.

Senator CALDER. So they have, then, no interest in the adjustment of the yard after it is over?

Mr. BULKLEY. No, sir.

The CHAIRMAN. Do you remember what you paid for the rental of that land for the Submarine Boat Co.?

Mr. BULKLEY. I do not remember that.

Senator HARDING. Mr. Bulkley, in any of these contracts was there any limitation or control of expenditure in the building of the plant?

Mr. BULKLEY. Yes, sir; there were several. It was designed that it should be to the interest of the contractors to keep down costs, and with that in view they had to share any excess above the estimated basis cost half and half with the Government, up to a certain maximum.

Senator HARDING. Before you get away from that, may I make the application? In the report made by Mr. Piez on the Hog Island plant, Mr. Piez makes the statement, for example, that the cost of driving 16,000 piles was $513,000, against an estimated cost of $89,000.

Mr. BULKLEY. Yes, sir; that is a different matter, but as to that we are not as well protected. What I was referring to was the cost of the vessels; the cost of the yard is a separate account, and in the cost of the yard the contractors have no direct interest. Whatever it costs is borne by the Emergency Fleet Corporation.

Senator HARDING. Then there is no brake on expenditure?

Mr. BULKLEY. There is no brake there in the way of a charge that can be imposed upon the contractor. Everything that they do is subject to control by the Fleet Corporation.

The CHAIRMAN. The agents' contract is to superintend the construction of the yard and to render the same services as to the building of the yard that they do as to the building of the ships?

Mr. BULKLEY. Yes, sir. I think I ought to go into a little explanation of that. Before I went with the Fleet Corporation I was working with the General Munitions Board and there had charge of contracts for the construction of cantonments. In that connection I urged very strongly this kind of contract, namely, giving the contractor a direct interest in savings and a direct penalty for losses as against an estimated basis cost. But we had the opinion of the very highest type of architects and builders in the country, actuated, I think, not by selfish motives, to the effect that that was an impracticable proposition in cantonment work, because the conditions in different localities would be so different that it was impossible to make an estimated basis cost.

Now, I presume that much the same consideration would apply to building these shipyards. There is this difference to be remembered, that in the building of these shipyards, while the contractor has no direct interest in the cost, he is giving his services for nothing. He gets no commission whatever on the cost of the shipyard. And it has been contended right along that if you get contractors of standing, their professional pride and their patriotism will be an adequate safeguard to the Government in trusting them as agents. Personally, I have always thought that it was well to provide some

other safeguard as well, but there did seem to be cases where that was not practicable.

Senator HARDING. You might add "prudence" to "pride and patriotism."

Mr. BULKLEY. Yes, sir; I think so, personally. But the cost of the yard relatively to the cost of the vessels in these contracts is not a large matter, and the service in building the yard is entirely without compensation. We do not even pay them for the "know how" in connection with yard construction.

Senator NELSON. In this Hog Island yard you pay the force?

Mr. BULKLEY. Not the executive officers, Senator.

Senator NELSON. No, not them; but you pay all the other employees?

Mr. BULKLEY. Yes, sir; we pay the entire cost of the job.

Senator HARDING. This is the specific point I was getting at. It appears, from Mr. Piez's report, that Hog Island is costing millions more than the estimate. There is no recourse for the Government in that: it is obliged to accept the outlay and pay the freight?

Mr. BULKLEY. Yes, sir: if the costs have actually run too high there is nothing to do but to pay them. In that contract we have this provision:

> The owner reserves the right to control, through its duly authorized representative, all orders for materials, machinery, equipment, supplies, and other purchases and commitments made under this agreement, or in its own name to make any such order, purchase, or commitment, subject to advice to the agent so as to avoid duplication. All contracts and orders placed by the agent shall be in the name of the owner by the agent.

Now, as to labor:

> The agent will comply with all instructions not contrary to law as to wages or conditions of employment of labor on this contract given to it in writing by the owner.

The CHAIRMAN. Now, if this cost has thus far exceeded all estimates and been wasteful and extravagant, who is responsible for that?

Mr. BULKLEY. I would not be able to place responsibility, Senator; what I am trying to develop is that you have an adequate check which can be placed on immediately to prevent further waste.

Senator HARDING. Then it is a fair inference to say that if there has been excessive extravagance there, it is through some neglect on the part of the Emergency Fleet Corporation?

Mr. BULKLEY. Possibly that might be inferred, but there may be circumstances to justify it. I would rather not say that; I would rather that you would investigate that as an independent proposition.

Senator HARDING. I do not mean that in an ugly way, but I am trying to get at the inherent fault in this relationship, to find out who is responsible for this inordinate waste of money. I inferred from your construction of the contract that the Emergency Fleet Corporation's agents could have stepped in in time to modify the plan of procedure if they so desired.

Mr. BULKLEY. They unquestionably could under the contract, but I do not know what difficulties they may have been operating under. I think it would be fair to let them have a chance to explain what they do.

Senator HARDING. Of course, we can assume they were very busy and had a thousand things to do, but that is where the fault must technically lie?

Mr. BULKLEY. Well, there may be some fault in the contractor, too. You will note that Mr. Piez's report, which was just called to my attention to-day, states that the work at the Merchants' yard and at the Submarine Boat yard is going on very satisfactorily. That is exactly the same form of contract.

The CHAIRMAN. They are supposed to have inspectors there and representatives of the Emergency Fleet Corporation?

Mr. BULKLEY. Oh, yes.

The CHAIRMAN. Independent of the agent?

Mr. BULKLEY. Yes. Now, there are these two other clauses in the contract which seem to me to give protection:

> The agent shall in the performance of its agreements hereunder comply with and be bound by all directions, instructions, and decisions of the owner or its authorized representatives; and compliance by the agent with any such direction, instruction, or decision shall be a justification and protection to the agent for any action so taken.

Another provision is:

> The agent, in all its acts hereunder, shall use its best efforts to protect and subserve the interests of the owner.

Senator VARDAMAN. There may be some doubt as to who is responsible for this extraordinary outlay, but there is not any doubt that the Government has to bear the expense.

Mr. BULKLEY. I think so far as the expense has been incurred, the Government will have to bear it.

Senator VARDAMAN. I think that point is very clear.

Senator CALDER. Mr. Bulkley, the work in preparing the yard for the actual building of ships is paid for by the Government always?

Mr. BULKLEY. Yes, sir.

Senator CALDER. Is this work being done by the Government or by the agent?

Mr. BULKLEY. By the agent, subject to supervision.

Senator CALDER. Supervision by the Government?

Mr. BULKLEY. By the Fleet Corporation; we talk of it as "the Government."

Senator HARDING. On Government account?

Senator CALDER. Yes.

The CHAIRMAN. That is part of the agent's contract, to build the yard under the direction of the Emergency Fleet Corporation, and they get their pay on the cost of the ships.

Senator VARDAMAN. Did the Government have these estimates made? Were any of these estimates made by Government agents, or rather by men directly employed by the Government, or were they made by this company that owned the land?

Mr. BULKLEY. I do not know how those figures were arrived at, Senator.

Senator VARDAMAN. In that instance of driving the piles, what was the estimated cost?

Senator HARDING. The increase is 500 and some per cent.

Senator VARDAMAN. It does seem to me that the person employed by the representatives of the United States to make that estimate

ıst have been some man who had never seen a ship built and knew thing about it, and just made a wild guess.

Senator JOHNSON. There are three items upon which no estimates re made at all: Temporary buildings, temporary telephone, and nporary railroads, for which we paid $698,000.

Senator VARDAMAN. That is gross carelessness, it seems to me.

Senator JOHNSON. It may all have been necessary, you know.

Senator NELSON. Mr. Bulkley, could not the Government—I mean that, the Shipbuilding Corporation—under the terms of this conıct at any time intervene and check any extravagance or mismanement in the construction of this yard?

Mr. BULKLEY. Yes; it certainly can, if it can differentiate as to ıich is legitimate expense it can check extravagance. What I mean convey is, there is a contract right to intervene, but it is always sier to see afterwards what ought to have been done than to see it advance.

Senator HARDING. But, in substance, now they have stepped in and ıt a controlling hand on it.

Mr. BULKLEY. I understand so.

Senator JONES. You do not know whether the Fleet Corporation ıs had any direct representative up there to supervise this work ɜfore that?

Mr. BULKLEY. Yes, sir.

Senator JONES. Do you know who it was?

Mr. BULKLEY. I understand Admiral Bowles has just been sent up.

Senator JONES. I understand that, too.

The CHAIRMAN. That was within the past week.

Senator JONES. What I am getting at was while these expendiures were being made.

Mr. BULKLEY. There was a man up there, but his name has slipped ny mind.

Senator JONES. Was he a member of the Emergency Fleet Corporation's force?

Mr. BULKLEY. An employee; yes, sir; an inspector—"district offiɜr" is the title he is known by.

Senator CALDER. Was he in immediate charge of this work?

Mr. BULKLEY. I do not know how close his supervision was. You ɜan find that out in a better way than by asking me.

Senator JONES. You say there was a district officer. We understand about the district officers, but did you have anybody else besides district officers?

Mr. BULKLEY. I do not know.

Senator JONES. This is a work in itself that was big enough to ɜquire the services of some man all the time.

Mr. BULKLEY. I understand they have had more than one there, ıut you can get that much more directly than from me. I have no ɜrsonal knowledge of it.

The CHAIRMAN. The district officer has inspectors under him to ook out for it, and they report to the district officer?

Mr. BULKLEY. I think so, but I have not had anything to do with hat.

The CHAIRMAN. I think that is the method practiced—the inspecɔrs report to the district officer, and he reports here.

Mr. BULKLEY. Ordinarily there are a large number of inspectors, but I do not know just the number.

The CHAIRMAN. Do you remember the cost of that Merchants Shipyard?

Mr. BULKLEY. $1,860,500.

Senator NELSON. That is, the yard exclusive of the land?

Mr. BULKLEY. No, sir; that is the land exclusive of the yard.

Senator NELSON. Oh, that is the land?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. Our contract with them is similar to the contract with the American International.

Mr. BULKLEY. Yes, sir. I should have added, when I said the Government had an option to purchase those tracts of land at cost, that it is cost plus all assessments and taxes paid by the agent for permanent improvements made during the term of the contract. The agent, in other words, to pay as part of the cost of the work the ordinary taxes, but any assessment for permanent improvement would be added to the option price of the land.

Senator NELSON. Can you tell us about the submarine company? The Government is paying for the construction of that yard, too, is it not?

Mr. BULKLEY. Yes, sir.

Senator NELSON. Who owns the ground there?

Mr. BULKLEY. The city of Newark.

Senator NELSON. The city of Newark?

Mr. BULKLEY. Yes, sir.

Senator NELSON. Does the Government or the company rent it from the city?

Mr. BULKLEY. The Fleet Corporation rents it from the city.

Senator NELSON. Do you know what the rental is?

Mr. BULKLEY. I have it here. I will find that directly.

Senator NELSON. All right; put it into your testimony when you revise it.

Mr. BULKLEY. We have it here now—$32,560; that is for the first 21 months, at the yearly rental of $32,560; the renewals for the period ending June 15, 1922, at the rate of $500 per acre; the next year at the rate of $600 per acre; the next year at the rate of $700 per acre; the next year at the rate of $800 per acre; and the next year at the rate of $900 per acre; and then the next year and all subsequent rental periods at $1,000 an acre; that is, 112.79 acres, including the areas of proposed streets, as shown on the accompanying map, or 71.41 acres, exclusive of the areas of the proposed streets.

Senator NELSON. Who owns the plant when it is completed?

Mr. BULKLEY. The Fleet Corporation owns the plant, but it is on leased land.

Senator NELSON. I know, but what provision is there at the expiration of the lease—who will own the property then—will it go to the city?

Mr. BULKLEY. To the city of Newark, I believe.

Senator NELSON. And the Government will have an option to buy it? In other words, who will own the plant then?

, etc.

or NELSON. How much is the Government investing in that you know?

ULKLEY. I want to say to you, Senator, that is a subsequent nt—the option was a subsequent agreement—and that is used my confusion.

or NELSON. That is, that the Government has the right to land from the city at that price, as you read?

ULKLEY. Yes, sir.

or NELSON. And then the yard will belong to the Govern- that your view of it?

ULKLEY. Yes, sir; then the whole of it will belong to the ent.

or NELSON. How much an acre did you say?

ULKLEY. $12,000, figured on the actual acreage. Those rentals ou were based on acreage exclusive of streets that had been lown there but never laid out.

or NELSON. This is on the basis of the acreage actually oc- y the yard?

ULKLEY. The purchase price is on that basis; the rental is naller acreage.

HAIRMAN. Is this swamp land?

ULKLEY. I think not, sir. I think that land has been bulk- and is in good condition, but I have never seen it.

HAIRMAN. The contract provides they are agents to build ay ships, do you remember?

ULKLEY. The original contract was for 50 ships. The supple- ontracts came in after my time.

or NELSON. These are the same kind of ships as the Inter-

Senator NELSON. So that what is the total amount they are to build all together under that?

Mr. BULKLEY. One hundred and fifty, that would make.

Senator NELSON. And the International 120?

Mr. BULKLEY. Yes, sir; including the subsequent order.

Senator NELSON. And the Merchant Co. has how many?

Mr. BULKLEY. The original contract was for 40 vessels.

The CHAIRMAN. The International was for 200, was it not?

Mr. BULKLEY. No; the original contract was a yard capable o building 200, but only 50 ships were covered by the contract, and th there was an option to order additional ships.

Senator NELSON. Seventy-five?

Mr. BULKLEY. Seventy have been ordered.

Senator NELSON. Making 120?

Mr. BULKLEY. Yes, sir; but the 70 were of a different size: are 8,500-ton ships instead of 7,500-ton ships. Here is an orde additional ships to the Merchant Shipbuilding Corporation f additional vessels.

Senator NELSON. That makes 60 in all.

Mr. BULKLEY. Yes, sir.

Senator NELSON. Were they the same size?

Mr. BULKLEY. No; 9,000 tons.

Senator NELSON. To be fabricated ships?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. I thought they had an order for 100.

Mr. BULKLEY. They had not at the time I left a contract f than 40. I find on this file an order for 20 additional, and I say for certain whether there have been more or not.

The CHAIRMAN. That makes how many, you say, for t chant Co.?

Mr. BULKLEY. Sixty, as I make it; I am not certain that i

The CHAIRMAN. And they are what size?

Mr. BULKLEY. Nine thousand tons.

The CHAIRMAN. The Merchants were at Bristol?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. And there they have an option on lan to the American International at Hog Island?

Mr. BULKLEY. They did have an option which has been

Senator NELSON. Can you tell us when we are to get the under these contracts?

Mr. BULKLEY. Yes, sir. There is a schedule of delivery the contracts, but that is a different matter from saying ships will be actually delivered, and as to that I can not sa

Senator NELSON. No; you can not say that. You do no to whether they will be able to comply with the cont delivery.

Senator HARDING. That is covered, Senator Nelson, i mony of Admiral Bowles more pointedly than an atto hope to give us, I rather think.

Mr. BULKLEY. I have no idea about that; I have not f operations.

Senator NELSON. Admiral Bowles, as I understand it, th would have no vessel ready this year.

Senator JOHNSON. That was Ferris's opinion, and it quently denied that the International would have vessels t

Senator JONES. The report by Mr. Piez would indicate there might not be any vessels ready this year.

Senator NELSON. Yes; Mr. Piez's report said they will not have any ready this year.

Mr. BULKLEY. Do you care for the schedule, what the contract calls for?

The CHAIRMAN. I think that is already in the record, what the contract calls for. Was there any feature of these negotiations from the time you took charge until the contract was finally consummated that varied from the original propositions?

Mr. BULKLEY. It varied in that the Government got a better contract than they originally proposed. The fees were materially reduced: the Government got the first option on the land instead of the agents getting the first option on the buildings, and we tightened up a great deal on the control over the agent. These clauses I have read to you were either inserted or tightened up in the course of our negotiations. Then, we made the contract in behalf of the United States, which we think is a benefit.

The CHAIRMAN. Those negotiations were largely with Mr. Robinson?

Mr. BULKLEY. Mr. Robinson and Mr. Begg.

Senator NELSON. Were the commissions that the Submarine and the Merchant Co. were to get on the vessels the same as the International?

Mr. BULKLEY. They figured out about the same as the contracts were signed. Of course, there are different sizes of vessels and different fixed fees, but it is figured in the same way.

Senator NELSON. They get the same rate of [illegible]?

Mr. BULKLEY. Yes, sir.

Senator NELSON. Do those contracts involve the same arrangement as the International: that is, while the work of building the yards is going on we take on their force and pay their [illegible] the same as we do in the case of the International?

Mr. BULKLEY. It is the same in that respect. The executive officers give their services and take it out of the fees, and the other employees are paid for by the Fleet Corporation.

Senator NELSON. Technical men and [illegible]?

Mr. BULKLEY. Yes, sir.

The CHAIRMAN. The International [illegible] the New York Shipbuilding Co.?

Mr. BULKLEY. I do not know [illegible] They have some affiliation there, [illegible]

The CHAIRMAN. That was a part of [illegible] for some time.

Mr. BULKLEY. Yes, sir; for some [illegible] know.

Senator NELSON. Is that part [illegible] City?

Mr. BULKLEY. I do not know [illegible]

Senator HARDING. The New York [illegible] den, N. J., if you will pardon me.

Mr. BULKLEY. I am glad [illegible] to know.

Senator NELSON. These other three yards we have referred to a on the Delaware, are they not?

Mr. BULKLEY. Two of them are: Hog Island and Bristol are o the Delaware.

Senator NELSON. The other is over on the other side?

Mr. BULKLEY. Yes, sir; that is, at Port Newark.

Further answering your question about what we had up in the negotiations, a rather important subject was how far the respons bility for acts of employees was to go. We straightened that ou which was a matter of some difficulty.

Senator NELSON. Was there anything in these contracts in respe to the liability for injuries to employees, as to who was to be liabl for it?

Mr. BULKLEY. Yes; that is in there.

Senator NELSON. Would the Government or the Fleet Corporatio be liable, or these men that you call the agents of the Government?

Mr. BULKLEY. That is provided for here:

The cost of casualty and liability insurance and the cost of such bonds, fi and other insurance as the owner may approve or require—

Let me explain that what I am reading is a part of the schedule what is to be included in the cost and paid for by the Fleet Co poration—

all losses due to accidents or casualties not compensated by insurance or oth wise and legal and other expenses in connection therewith sustained or incurr by the agent, including the cost of settlements made with the approval of t owner and the cost of the removal and replacement of defective or unsatisfa tory workmanship or materials; but if any such losses and expenses and (o necessity for any such replacement shall be caused by the fault or neglect of t agent's executive officers, managerial and superintending employees, forem and leading men there shall be deducted from the agent's fee such part of su losses and (or) cost of such replacement as, together with deductions und Articles IV and XX, shall not result in an aggregate average deduction fr such fee of more than $14,000 for each vessel or reduce the agent's average f for vessels constructed hereunder below the minimum fee provided for in Arti XXV hereof.

It should be explained that we have agreed to give a certain av age maximum of fees for all the vessels, but if accidents are due the fault of these officers that are here enumerated the loss will deducted from the agent's fee, provided it does not bring the f below the minimum.

Senator NELSON. That is, it will be deducted provided it does n reduce it below 5 per cent?

Mr. BULKLEY. No; it might be a good deal below 5 per cent. T normal fee is fixed at $55,000, the estimated basis cost being fixed $1,100,000; the minimum fee is $41,000. That might be very mu less than 5 per cent, because the actual cost of the vessel might be good deal more than $1,100,000, but it would be less than 4 per ce of the estimated basis of cost.

Senator NELSON. If there is anything further you can supply t committee, you can include it when you revise your statement in t galley proofs. Can you give us the names of the officers and directo of the International Corporation?

Mr. BULKLEY. Yes, sir; I can give you the officers and directors right.

Senator NELSON. But you can not give us the names of the stoc holders?

Mr. BULKLEY. No, sir; I have not the names of the stockholders.

Senator NELSON. Can you give us the same as to those two other companies?

Mr. BULKLEY. I will try to get them. I do not know that we have those.

Senator NELSON. The Submarine Co.?

Mr. BULKLEY. I do not know that we have those, but I will try to get them for you.

Senator NELSON. I do not remember the dates of these contracts. Were the Submarine contract and the Merchants' contract about the same date as the International?

Mr. BULKLEY. Yes, sir. The Merchants' contract is dated September 7, the Submarine Boat the 12th, and the American International the 13th.

Senator NELSON. And these were all consummated under Admiral Capps's administration, were they?

Mr. BULKLEY. Yes, sir.

Senator NELSON. But the negotiations had been opened before he became manager?

Mr. BULKLEY. Yes, sir.

Senator NELSON. They were still pending when he took charge and when you came there?

Mr. BULKLEY. Yes, sir.

Senator JONES. They were practically closed when he came in, so far as the Emergency Fleet Corporation was concerned, were they not, except for the changes which he made?

Mr. BULKLEY. That is a fair way to put it. He made certain rather important changes, but a good many things remained as they had been understood before that.

Senator JONES. In other words, what I am getting at is this: When he came in they were practically ready for closing?

Mr. BULKLEY. I understand so. It is perhaps presuming to say what would have been signed if the other administration had gone on.

The CHAIRMAN. The other administration had decided to have these plants located in this way and to have agents for the Fleet Corporation for construction?

Mr. BULKLEY. I understood they had decided on that. We certainly did not make any change in the locations of the plants.

Senator NELSON. Did the board approve of the action of Admiral Capps in this matter when it was submitted for their approval?

Mr. BULKLEY. I do not know just what action they took on it, Senator; I know it was with their concurrence. Mr. Hurley was advised at all times what was going on and signed the contracts.

Senator NELSON. He signed the contracts?

Mr. BULKLEY. Yes, sir. Admiral Capps was not signer of the contracts; he simply put his initials on to assure Mr. Hurley that he had approved it.

The CHAIRMAN. Are there any other questions? I believe that is all, Mr. Bulkley.

Senator VARDAMAN. Mr. Chairman, I have been requested by Senator Bankhead to say to the committee that he had some witnesses here from Alabama which he wanted to put on to-morrow or the next day for some purpose, I think in connection with the Warrior River. He asked me to announce this to the committee.

The CHAIRMAN. I have a telegram, also, from Mr. J. W. Powell to the effect that he will be here to-morrow, and we can adjourn until to-morrow at 2 o'clock. But I will say before we do that that W. C. Saeger is here, and he was, I believe, on Mr. Bulkley's staff, and he would probably have to cover about the same ground you did?

Mr. BULKLEY. I do not know whether there is anything further you want to ask Mr. Saeger. He was in charge of the work of keeping the contracts in order from day to day as the negotiations went on.

The CHAIRMAN. Mr. Saeger, you have heard Mr. Bulkley's statement. Is there anything you could add?

Mr. SAEGER. Not that I know of, Senator.

The CHAIRMAN. You were familiar with these contracts from time to time and your recollection accords with his?

Mr. SAEGER. So far as I know anything about what Mr. Bulkley testified to, I concur. He knew about some things I was not familiar with.

The CHAIRMAN. I believe, then, you need not go over that, Mr. Saeger. We are much obliged to you.

(The following letter was subsequently received from Mr. Bulkley and was directed by the chairman to be inserted in the record:)

COUNCIL OF NATIONAL DEFENSE,
Washington, February 8, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman Committee on Commerce,
United States Senate, Washington, D. C.

MY DEAR SENATOR FLETCHER: In the course of the testimony which I recently gave before your committee inquiry was made as to the changes made in the form of contract under negotiation with the American International Corporation after I became counsel for the Emergency Fleet Corporation and up to the time of the final consummation of the contract.

I mentioned the fact that the amount of fees to the American International was very substantially reduced; that the contract was made by the Fleet Corporation as representative of the United States; that the title to the vessels in process of construction was placed in the United States; that the control of the Fleet Corporation over the work was in many respects strengthened; that at the conclusion of the work the Fleet Corporation has a prior option to buy the land instead of the contractor having a prior right to buy the buildings; I also called attention to the clause which we inserted requiring the contractor to act in all respects for the best interests of the Government.

Other rather important changes provided that Federal taxes should be paid by the contractor and not charged as part of the cost of the work; required more stringent trials for the ships and clarified the provisions relating to trials; and provided for the right of the Emergency Fleet Corporation to insert into the contract an eight-hour labor clause.

Other changes which may be worthy of mention, though of less importance, provided for an option on the part of the Fleet Corporation to reduce the size of the yard; that no extensions of time on account of delays due to unforeseen circumstances would be allowed unless notice of intent to claim extension should be given within 10 days of the occurrence of the delay; that the contractor should be required to give aid in producing evidence in patent litigation; that appeals from decisions from the general manager of the Fleet Corporation must be made within 10 days after his decision; and that the Fleet Corporation might, at its option, use the shipyard to fit out wooden hulls.

There were of course countless verbal changes, many of which occasioned some controversy, and the provisions for cost accounting were revised and clarified.

Respectfully yours,

ROBERT J. BULKLEY.

(Thereupon, at 4.45 o'clock p. m., the committee adjourned to meet at 2 o'clock p. m., Friday, February 1, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

FRIDAY, FEBRUARY 1, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., Hon. Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Martin, Bankhead, Simmons, Kirby, Nelson, Jones, Sherman, Harding, Calder, and Johnson.

STATEMENT OF MR. JOSEPH W. POWELL, VICE PRESIDENT BETHLEHEM SHIPBUILDING CORPORATION, BETHLEHEM, PA.

The CHAIRMAN. Mr. Powell, state your name and place of residence.

Mr. POWELL. J. W. Powell; my residence is Bethlehem, Pa.

The CHAIRMAN. What business are you engaged in?

Mr. POWELL. I am a shipbuilder and vice president of the Bethlehem Shipbuilding Corporation (Ltd.).

The CHAIRMAN. What experience have you had in shipbuilding, Mr. Powell?

Mr. POWELL. Well, I have been building ships all of my life. I am a Naval Academy graduate, was a member of the construction corps until 1906. I left the Navy to go with the Cramp Shipbuilding Co. and left the Cramp Shipbuilding Co. in 1914 to take the presidency of the Fore River Shipbuilding Corporation. About three months ago the Fore River Shipbuilding Corporation was merged into the Bethlehem Shipbuilding Corporation, which is a new company that operates the various shipyards that have been owned by the Bethlehem Steel Co. for a number of years.

The CHAIRMAN. What yards have the Bethlehem Shipbuilding Corporation now?

Mr. POWELL. They have the Fore River Shipbuilding Corporation yards, the Samuel L. Moore & Co. yards.

The CHAIRMAN. State where they are located.

Mr. POWELL. The Fore River Shipbuilding Corporation is at Quincy, Mass.; the old Samuel Moore & Sons, now the Moore plant, located at Elizabethport, N. J.; the old Harlan & Hollingsworth Co., now the Harlan plant, located at Wilmington, Del.; the Sparrows Point plant, that used to be the Maryland Steel Co., located at Sparrows Point, Md.; and the old Union Iron Works Co., now the Union Plant, located at San Francisco, Cal.

The CHAIRMAN. Without going into details, but in a general way, how many ships have you under construction?

Mr. POWELL. About 250, altogether, Senator, at the various plants. That includes, of course, a very large number of ships for the Navy.

The CHAIRMAN. I mean now, with reference to merchant ships.

Mr. POWELL. We have around 60.

The CHAIRMAN. How many of those are commandeered ships, and how many are new ships?

Mr. POWELL. We have just recently taken a very considerable number from the Fleet Corporation—a total of 34. The balance of the ships are ships that were commandeered.

The CHAIRMAN. What types of ship are you building? According to the Ferris design, or what?

Mr. POWELL. No; Senator, we do our own designing. These ships are all ships the plans of which have been prepared in our department.

Senator NELSON. Are they of wood or steel?

Mr. POWELL. Entirely steel; we do no woodwork whatever.

The CHAIRMAN. About what tonnage?

Mr. POWELL. The last contract that we took for the Fleet Corporation was about 250,000 tons.

The CHAIRMAN. I mean each ship.

Mr. POWELL. Of dead-weight. The smallest ships were 7,500 tons, with the exception of an order for ocean-going tugboats that we took, and the largest were 10,100 tons, except the transports. We took two of the Emergency Fleet Corporation transports, and they are somewhat larger vessels.

The CHAIRMAN. Mr. Powell, you have had dealings, then, with the Emergency Fleet Corporation and are now having dealings with them right along. How does that organization impress you now, as to efficiency and completeness?

Mr. POWELL. Well, Senator, the Emergency Fleet has tackled one of the biggest jobs that has ever been given to a body of men in the world. I may say that the policy of the Bethlehem Steel Co. in all the shipyards controlled by that company was to segregate its navy and its merchant marine into separate yards. Fore River was one of the yards that was given up practically altogether to Navy work, and up to three months ago, when I was in charge of that yard, I had very little reason to see the Emergency Fleet Corporation in the early stages of its existence, so that my experience with them has practically all been in the last two months, since the present management was in office. Mr. Hurley, I have not had occasion to see very often, and Mr. Piez, I suppose I have not seen him a dozen times altogether. Mr. Piez, I had met just once—I sat beside him at the theater one night—before he came into this position. I did know Mr. James M. Dodge very well. He was the man who brought Mr. Piez up and educated him, and there was never a finer man on earth than Mr. Dodge, and when I found out that Mr. Piez had been called to this position, my knowledge of Mr. Dodge and his knowledge of men, made me feel that a particularly wise selection had been reached. The experience that I have had with Mr. Piez has certainly confirmed that feeling.

The CHAIRMAN. Was Mr. Dodge at one time president of the Link Belt Co.?

Mr. POWELL. Yes; he was the president of the Link Belt Co. He made Mr. Piez president and he took the chairmanship of the board of directors, and upon his death about 18 months ago Mr. Piez succeeded Mr. Dodge. The first time that I met Mr. Piez after he came into his present position he asked the shipbuilders to meet him in Philadelphia one evening at a meeting, and he and Admiral Harris, who was the general manager of the corporation at that time, met us there and spent two or three hours going over the various troubles that were perplexing us, and we had many of them, and I know the unanimous feeling of that meeting after the three hours' session with Mr. Piez was one of great relief and great satisfaction to find that we were going to deal with a man that talked the same language which we talked and a man who immediately impressed us as so eminently fair that we felt that it was going to be possible to do the enormous business that we were undertaking with them.

The CHAIRMAN. Do you regard his organizing ability as exceptional?

Mr. POWELL. From all I know of him, I should say that he is a splendid organizer. Since he has been in charge of the company I have had a chance to see the various changes that he was making, and it has impressed me very much that in a very quiet and unostentatious way he was doing a great deal to get his various departments whipped into shape and to make a real machine out of the men he had gathered around him.

The CHAIRMAN. Have you suffered any delays by reason of any transaction with the Emergency Fleet Corporation before this time?

Mr. POWELL. Well, Senator, I had really no business with them at all until after Mr. Piez's régime. They did not do business very quickly. They do not do business now very quickly. There are so many people who have to have a hand in everything that is done that the process of getting things settled is a very slow one. I did more business with the Navy Department in two hours than we have been able to do with the Emergency Fleet Corporation in two months. I do not say this in a spirit of criticism, because in getting an enormously big machine like this going, in getting to know your people, that sort of thing is inevitable, and I think probably that it is remarkable that they got the thing done in two months—more remarkable than that it took us that long to do it.

The CHAIRMAN. Does it seem to be moving more rapidly now?

Mr. POWELL. Oh, yes; I suppose that it is moving more rapidly all the time.

The CHAIRMAN. How are you getting on with your work, more particularly the Emergency Fleet Corporation work, and if you are having any difficulties, what are they? If there is anything that we can help you about we would like to know it.

Mr. POWELL. Of course shipbuilding is always a business beset with difficulties. There are so many things that go into a completed ship, even in normal times, we always expect to have a great deal of trouble. It goes with the business and is part of it, and it is for that reason one of the most interesting businesses on earth. At present, of course, we are suffering enormously from the transportation situation. I can not put that too strongly. The report that I had the other day showed that we had 1,700 carloads of material on the railroads, and the amount of stuff that was cor

our yards was almost negligible. There was one lot of cars witl some extremely important material on board that we were tracing we were following it, and every time a wheel turned we knew it and those cars have a record of moving 60 miles in 17 days. O course, as long as this situation continues our project is going to b very badly blocked.

The severe weather is also a large handicap. A great deal o shipbuilding is done out of doors, and those of our yards on th eastern coast are certainly not working on the average over 50 pe cent efficiency as long as this bitter cold weather and this snov lasts. Of course those things the Lord controls, and we have t take them as He gives them to us, but we hope the railroad situa tion will be improved.

The CHAIRMAN. Are you behind with your schedule as to progres on the work?

Mr. POWELL. We really are not working any hard and fast sched ule. We are building everything as fast as we possibly can. W have a great many commitments with the Navy Department tha take precedence at some of our yards over other work.

The CHAIRMAN. Under your contracts with the Emergency Flee Corporation you have to have vessels launched by certain dates, take it—some certain time?

Mr. POWELL. With respect to the commandeered ships, there ar requirements of that sort. I suppose, taking it full and by, all o our yards are pretty close to being on time. There are some of ther behind time and some of them ahead of time.

The CHAIRMAN. How many men do you employ?

Mr. POWELL. We had last week 35,000 men on the rolls of ou shipyards.

The CHAIRMAN. Can you use more?

Mr. POWELL. And we are increasing at about the rate of 3,00 men every four weeks, 3,000 men a month. That is as fast as it i practicable to absorb labor into the shipbuilding business unde present conditions.

The CHAIRMAN. Those are not all trained men?

Mr. POWELL. There are practically none of them trained in shi building. We are getting shoemakers and stonecutters and pian movers, and almost everything except shipbuilders, and one of th great problems we have had to solve has been the training of the men. Of course as you add to a small training force such a larg number of men who are untrained in the business, the efficiency c the force drops off very rapidly. We figured a day or two ago th with our present force of men under present conditions we coul turn out between one and one and one-third tons of ships pe man per month; that is, if all of these men were turned on to th building of, we will say, a 10,000-ton merchant ship of a standar type, it would represent somewhere between 62 and 65 to 70 c those ships a year. I suppose, if we had nothing but shipbuilder and of all of these 35,000 men were really skilled mechanics in th business that we are doing, that we would turn out around 2 tor of ships per man per month, which is a very big business. But in business that has grown so rapidly to such enormous proportion it is absolutely essential that we should go through this period c efficiency.

Now, I think most of our yards are past the worst of it, and because we are doing the same thing over and over again the amount of work that we can hope for will increase.

Senator VARDAMAN. Have you any trouble with your labor?

Mr. POWELL. Senator, we have been free from strikes in some of our yards, and in some of our yards we have had a great deal of trouble. Fore River has only been closed on account of strikes for six days in the last six months. The Moore plant, at Elizabethport, was closed four months during the last summer and fall. Harlan, at Wilmington, was closed for many months, and the effects of the strike hang on for a long time. I suppose they lost six months last year on account of strikes.

Senator NELSON. What were the alleged grounds of the strike?

Mr. POWELL. That is not very simple to explain, Senator. Generally the men wanted more money. That is the primary reason for the strike. Sparrows Point, Md., has had no strikes at all, and the Union plant had a strike that was coincident with the general strike on the Pacific coast. We are paying in all of our eastern yards the schedule that is paid at the nearest navy yard. The Union plant is paying the rate that was agreed upon by the wage board that was sent out to the west coast by the President.

Senator VARDAMAN. Can you state the amount that is paid per man, or is it by the piece?

Mr. POWELL. We have about two-thirds of our work on a day basis and one-third on a piecework basis. The average earnings per man, I figure, are pretty close to 50 cents an hour.

Senator VARDAMAN. And you are working on eight hours a day?

Mr. POWELL. We are working on 8 hours a day, but we are working 9 and 10 hours, as we can, five days a week, and the men are making in most of the trades 56 hours a week. The night shift only works five nights a week and——

Senator NELSON (interposing). You work two shifts?

Mr. POWELL. We work two shifts wherever we can, in our machine shops and plate shops and other places of that sort, and we work a considerable amount of night labor; but out in the shipyard, particularly in this kind of weather, it is practically impossible to get men to work.

Senator RANSDELL. What is the additional wage for overtime?

Mr. POWELL. They get time and a half for the time beyond eight hours.

The CHAIRMAN. Do the men prefer the overtime?

Mr. POWELL. This 56-hour week is what appeals to the workingmen more, so far as I can find out. I think, if you gave them their choice of any arrangement of hours, you would find that the average workingman would rather work 10 hours a day for 5 days and 6 hours on Saturday and have this overtime pay for the time beyond the 8 hours. It gives him the maximum earnings. It gives him Saturday afternoon off; and we really worked it out, after trying a great many combinations, as the one that would suit the men the best and the one that gave us the most hours per week.

Senator CALDER. Are you allowing a 10 per cent bonus in the western yards?

Mr. POWELL. Yes; we are allowing a 10 per cent bonus in the western yards. That I believe was a very great mistake, to have

ever put that bonus in effect. There are shipbuilders who disagree with me on this, but I have just come back from the Pacific coast. I talked with many of the prominent men in labor circles—I do not mean by that labor leaders, but men who employ labor out there—and without exception they agree that that bonus at that time was a great mistake; that if the Emergency Fleet Corporation had stood pat and said that—and if this board had gone out there and set these wages, and said, "That is what you are going to get, and we are not going to talk to you about it," there would never have been heard another kick about it. The bonus gave infinitely more trouble than good, because it stirred up the men, and I think it was a very unsettling influence and unfortunately it was administered so that nobody in the world knew what the Emergency Fleet Corporation wanted us to do or how much we were supposed to pay.

Senator VARDAMAN. Was that 10 per cent given to labor?

Mr. POWELL. Oh, yes; absolutely.

Senator HARDING. That becomes permanent to-day, does it not?

Mr. POWELL. I so understand, that the new wage schedule that carries a 10 per cent increase was to go into effect on February 1.

Senator CALDER. As a permanent increase?

Mr. POWELL. As a permanent increase.

Senator CALDER. Have they asked for another 10 per cent bonus?

Mr. POWELL. That I could not answer. I understood that this 10 per cent increase was to settle the question there of bonus.

Senator CALDER. Are you paying any bonus in the eastern yards?

Mr. POWELL. No; we are paying no bonus for attendance in the eastern yards. Of course, that was in reality an attendance bonus.

The CHAIRMAN. Don't you pay a premium in the eastern yards?

Mr. POWELL. No. Some of the yards do. You have got about 65 per cent of the men that will attend, anyhow, and about 15 per cent of them that will not attend, anyhow, and about 20 per cent that may or may not attend, and I do not think you should pay 70 per cent to have some effect on the other 20 per cent.

The CHAIRMAN. Will you be able to get these additional men, you think?

Mr. POWELL. On the present schedule of wages that we are paying we are going to get men just as fast as we can absorb them; I am perfectly confident of that. I have studied the labor situation very closely the last year. We started up at Fore River not quite a year ago to build up the force there, and we employed Mr. Meyer Blumfield, who is now with the Emergency Fleet Corporation, and, in fact, I afterwards recommended him to Col. Goethals to take the work that he is now doing for the corporation.

Senator VARDAMAN. What is that work?

Mr. POWELL. He is in charge of what they call the service department; that is, he is in charge of looking out for the sources of labor supply and all such in connection with the training of the labor for the shipyards.

Senator BANKHEAD. Do you have any trouble about housing conditions?

Mr. POWELL. Yes, sir; we are having a great deal of trouble at some of our yards; I mean, it varies in different localities. At San Francisco we are not having any difficulty at all. Both of the yards there are so located that they have ample housing facilities.

Senator BANKHEAD. How about the eastern yards?

Mr. POWELL. Sparrows Point is in very bad shape. The yard is good way out from the city of Baltimore. The men are dependent ı the Pennsylvania Railroad and the trolley lines. It is a long olley ride and the train service is poor. The consequence is that parrows Point is working now 3,000 men less than they should be orking. A housing development near that plant would be of very eat benefit to us in speeding up the shipbuilding as to that yard. here are at the present time about, I think, 400 houses, 200 mostly ished and 200 nearing completion, that are on the outskirts of altimore, not over 20 minutes by trolley from the yard. They are ing held by the builders for sale and there is an opportunity there take over those houses for use of shipyard workers only. That ould give us immediate and very considerable help.

Senator NELSON. Can they be secured at reasonable prices, either ought or rented?

Mr. POWELL. I understand that the United States Government, at e present time, can take them at any price it wants to pay.

Senator VARDAMAN. At what anybody wants it to pay?

Mr. POWELL. Not in our experience.

The CHAIRMAN. How long after a ship is launched before it is put ito service?

Mr. POWELL. That depends on the type of ship. In ordinary merhant ships if she is pretty well completed on the ways, she can be inished up in three weeks after she is overboard, but that is largely ı matter of practice.

For instance, the Union plant launches their ships in a less finished state of completion. It usually takes about three or four months on the stocks and then two and a half or three months overboard. In the East we will keep the ship on the stocks a month or two longer and will reduce the time that she lies in the water by the same amount. That is merely a matter of local practice. If a yard has plenty of building slips, it will normally keep the ship on the stocks longer than if it is short of building slips. Of course, if you talk about a passenger ship or a naval vessel, then the time that is necessary after her launching is very much greater, and depends entirely upon the type of ship.

The CHAIRMAN. The machinery is put in after the ship is launched?

Mr. POWELL. Generally, yes; although in some yards and at some times we do not do it. For instance, at Fore River we built one small oil tanker last year, where the machinery was completely installed before she was launched, but that is not the normal practice.

The CHAIRMAN. Have you ever seen Hog Island?

Mr. POWELL. No: I have never seen Hog Island at all.

The CHAIRMAN. You spoke about training men. What is the process there?

Mr. POWELL. We have gone very extensively into that subject for the last year. Of course for different trades the process is different. We have run night schools for men who wanted to improve themselves in a great many trades. Usually the method was to take one of the leading men in a department and put him in charge of a class of these men. The course was laid out and supervised by the man who was at the head of our so-called service department and it was made practicable, the sort of thing that would teach a man who knew

nothing about the business to be a helper. It would teach him enough so that he would be advanced in rating to a mechanic's rating. In some of the rougher trades, like riveting, we run regular outdoor schools. We take a couple of steel plates and fix them up in the yard, punch holes in them, and then we take a green gang who never saw a rivet driven, and show them how to drive them and cut them up. After we have paid them for that at the rate of 40 cents an hour for a week or more, they begin to get to the place where we can use them on the simpler work, and we graduate them to the simpler work and then gradually up the line until they are finished riveters.

Senator VARDAMAN. Do I understand you to say that they are paid to take those lessons?

Mr. POWELL. Yes; they certainly are. From the time that they come into the yard they are paid.

Senator HARDING. What guarantee have you that they will work for you after they get the schooling?

Mr. POWELL. None whatever. But the other shipbuilders are doing the same thing, and as long as everybody else does the same thing we are getting nearer the point where there will be a sufficient supply to do this labor.

Senator HARDING. Do you find that the exemption clause helps you?

Mr. POWELL. Yes, unquestionably; that is a considerable benefit to us, both in keeping the men in the shops and in bringing men to us. I can not differentiate the relative value of the high wages we are paying and the benefit of this exemption clause, but we get a great many men within the draft ages. Probably 65 or 70 per cent of the men we hire are between 21 and 30 years of age.

Senator HARDING. Apart from your naval contracts, how much tonnage are you going to complete in 1918?

Mr. POWELL. That is a pretty hard question to answer offhand.

Senator HARDING. Well, approximately?

Mr. POWELL. I should say about 450,000 tons, but I will check that figure up when I go over this record.

Senator HARDING. What proportion of that will you deliver by the 1st of July?

Mr. POWELL. Oh, about 35 per cent of it or 40 per cent of it—I will say 40 per cent of it by the 1st of July.

Senator HARDING. That is largely in requisitioned ships?

Mr. POWELL. Those are all requisitioned ships. There will be none of those ships contracted for direct with the Emergency Fleet Corporation.

I want to say right here, on the question of the number of ships that are going to be built in this country, that I think that the people who have made the estimates for the Emergency Fleet Corporation have very much overestimated the possibilities. A year ago I figured out that during this present year, if we built a million and a quarter tons in this country, dead weight, that it would be a most creditable performance.

Senator JONES. In the year 1918?

Mr. POWELL. In the year 1917 just past. I think I was a little optimistic. From all I can find out the tonnage is under my figure and I am very sure that in 1918, with the various handicaps we are going to be up against, if the country turns out 3,000,000 tons it will be a very wonderful performance.

Senator JOHNSON. You put that as a maximum?

Mr. POWELL. Very close to the maximum.

Senator JOHNSON. Two and one-half millions would be nearer to it?

Mr. POWELL. No; I think it will be very close to that figure.

Senator JOHNSON. Take your own instance. Have you any contracts with the time limit for construction this year other than the requisitioned ships and the Navy ships?

Mr. POWELL. I do not think I understand your question.

Senator JOHNSON. You have first your contracts with the Navy?

Mr. POWELL. Yes.

Senator JOHNSON. Those constitute most of the ships that you are building now for the Government?

Mr. POWELL. Yes: but they are separated into two yards.

Senator JOHNSON. You have in addition to that certain requisitioned ships which you are building?

Mr. POWELL. Yes.

Senator JOHNSON. Have you any ships which you are building under independent contracts made with the Emergency Fleet Corporation?

Mr. POWELL. Yes; but very few of them will be finished this year.

Senator JOHNSON. First, how many are you building under contracts made with the Emergency Fleet Corporation—I mean approximately? I do not ask you exactly.

Mr. POWELL. I gave that figure up above, and I just wanted to give you the same figure twice; that is all.

The CHAIRMAN. I think he said 60.

Mr. POWELL. Not with direct contracts.

Mr. JOHNSON. Nobody did understand it, then.

Senator NELSON. I did not understand how many you directly contracted for.

Mr. POWELL. Thirty-two were contracted for direct.

Senator NELSON. How many requisitioned?

Mr. POWELL. And the balance of the 60 were ships that were commandeered.

Senator NELSON. How many of them?

Mr. POWELL. Twenty-eight of them.

Senator JOHNSON. These 32 ships, they are independent contracts made—about when, in the year 1917—with the Shipping Board?

Mr. POWELL. The requisitioned ships——

Senator JOHNSON (interposing). Oh, no; I am speaking of the others.

Mr. POWELL. The others were just made this last month.

Senator JOHNSON. That is—December, do you mean?

Mr. POWELL. In January.

Senator JOHNSON. January, 1918?

Mr. POWELL. 1918.

Senator JOHNSON. Was there a time limit for the launching of these ships?

Mr. POWELL. They were all to be completed prior to July 1, 1919. They were all for completion within 18 months, and we agreed to use our maximum efforts to complete them just as soon as we could.

Senator JOHNSON. It is unlikely that you will complete them this year, is it not?

Mr. POWELL. There is not a chance. Some of them will be con pleted this year. There are some tugs and small ships of that so that will come in the latter part of this year, and some of the larg ships, but very few of them.

Senator JOHNSON. Senator Harding calls my attention to the fa that those could not have been included, of course, in the estimat that were made of the tonnage that we will have this year, as th were not contracted for until this month.

Mr. POWELL. No.

Senator JOHNSON. These are new contracts?

Mr. POWELL. These are new contracts.

Senator JOHNSON. Could you have taken contracts last year f the construction of ships from the Emergency Fleet Corporatic with a prospect of, with fair diligence, completing them?

Mr. POWELL. We could have taken some contracts. By increasi the facilities at our yards, some of them could have been complet this year, not a great many.

Senator JOHNSON. Did you make any effort to procure any such?

Mr. POWELL. We had numerous sessions with the Emergency Fle Corporation, covering a number of months. I am not speaking fro my own experience but from the experience of the people who we at that time running the other yards. But the Emergency Fle Corporation was very busy with their contracts with the differe people, and they did not seem to be ready to do business with us.

Senator JOHNSON. Over what period did those negotiations extenc

Mr. POWELL. From the time the Emergency Fleet Corporatic came into existence.

Senator JOHNSON. That is, substantially all last year you we knocking at the door of the Emergency Fleet Comporation, askir for contracts?

Mr. POWELL. We did not knock very hard, because, up to th time we could get commercial contracts as fast as we could mal them.

Senator JOHNSON. Subsequent to the 3d of August, did you that? During what period were you holding these negotiations?

Mr. POWELL. We never pushed the Emergency Fleet Corporatic except to go to them and say that we were ready whenever th were ready to talk to us, until November, and it has then taken about two months to get settled up with them.

Senator JOHNSON. Am I accurate, then, in stating that from N vember until January, you were asking for contracts which we finally consummated by you getting the contracts in January?

Mr. POWELL. Yes.

Senator JOHNSON. Was there any particular difficulty in Noven ber?

Mr. POWELL. The principal difficulty was that everybody w loaded up to the neck with work, and it took time to come to tern as to how they should be delivered.

Senator JOHNSON. With whom did you deal in November?

Mr. POWELL. Mr. Piez and Admiral Harris and with the vario people under them that we were referred to. Mr. Piez came i prior to Thanksgiving and that is about the time we started o negotiations.

Senator JOHNSON. Then in December you were negotiating in like fashion?

Mr. POWELL. Yes.

Senator JOHNSON. About what date did you contract in January?

Mr. POWELL. We were awarded the contract on the 3d of January, although the papers are just being signed now.

Senator CALDER. In your contracts with the Navy Department, on what system are they based, cost plus or straight contracts?

Mr. POWELL. We have two types of contracts with the Navy Department. The first lot of ships that we built for them after the war commenced, and the ships that we had on contract before, we built on a cost plus 10 per cent basis. We did not like that basis. It was something that we were forced into because we could not seem to agree with the Navy Department on any other system whereby we were guaranteed against loss, and finally that was accepted as the only one that we could get together on. As the vessels built under these contracts proceeded, the various disadvantages of that form of contract became more and more clear, so that when we came to the later boats we built them on a fee basis: that is, the amount that we earn on those boats is a fixed sum per boat, but we agree with the Navy Department on what the boats should cost and anything that we can build them for less than that amount we share with the Navy Department. I am a little bit proud of these last Navy contracts because I had a great deal to do with forming them up and, I think, it is the cleanest, nicest, and straightest form of Government contract that has ever been drawn.

The CHAIRMAN. Suppose they cost more?

Mr. POWELL. That, the department stands. They are giving us the incentive to keep the cost down, which is more desirable and at the same time protects them against the increased cost, which in this state of the market is beyond our control. We are being asked to put on men at an enormous rate, to speed our ships at an enormous rate, to work overtime, and to do all of these things that are not economical and that will not pay, and, of course, those things are beyond our control, but they do give us the opportunity to increase our fee if we can keep underneath this estimated cost.

Senator VARDAMAN. Explain to me how that is done. I am a novice.

Mr. POWELL. How do you mean, Senator Vardaman?

Senator VARDAMAN. You fix the price of the ship with the Navy Department?

Mr. POWELL. We agree with the Navy Department that under the conditions under which these ships are to be built, we will take a type ship that would cost a million and a half dollars. The Navy Department says to you, "We will pay you $135,000 for building that ship, no matter what she costs, but if you do build her for less than a million and a half, we will give you half of what you save under that million and a half, in addition to your $135,000." In other words, if we can build her for $1,300,000, the Government saves $100,000 and we get $100,000 for saving the $200,000.

Senator VARDAMAN. But you still get the premium?

Mr. POWELL. It is not a premium, it is a fee: it is the same as the lawyer's fee for taking care of his client, or the doctor's fee for taking care of his patient.

Senator VARDAMAN. In the estimates you make, you estimate that that is about the cost of the ship?

Mr. POWELL. Yes, sir.

Senator VARDAMAN. With the labor and material at the price to-day?

Mr. POWELL. Yes.

Senator VARDAMAN. But if it happens to go up, what then?

Mr. POWELL. We take all the risk of the material. If the material goes up we simply lose our chance of making that extra stake.

Senator VARDAMAN. Then what is it that you do not take the risk of losing on?

Mr. POWELL. We are not taking any risk on it, Senator. We are not taking any risk on it and on that amount of a fee no shipbuilder can afford to take a risk. If we have to build ships that cost a million and a half at $135,000, there is not any margin that will allow us to take a risk.

Senator VARDAMAN. Suppose you build that ship for a million and a half. Does not that give you a fair profit on that investment?

Mr. POWELL. No, sir; we could not live on that basis.

Senator VARDAMAN. You could not?

Mr. POWELL. No, sir.

Senator VARDAMAN. Could you give the Government a price for that ship?

Mr. POWELL. If we gave you a price on the ship, we would want about $2,000,000 for it. In other words, if we took the risk instead of the Government, we would have to have at least that much additional money. Some of the biggest contracts that have been made with private individuals in this country have been made on that basis. We had, at the time of the commandeering act, a number of ships that were building on that basis.

The CHAIRMAN. How long do you find from your experience that it takes to train a green hand to be an expert riveter?

Mr. POWELL. It depends, of course, on the man.

The CHAIRMAN. Of course. I can realize that.

Mr. POWELL. One man will get to be quite a good riveter in weeks. Another man will get to be quite a good riveter in 6 weeks and again it will take 8 and 10 weeks. We figure 6 weeks as the average time to teach a man so that he can do ordinary plain riveting. Of course, there is an enormous difference in the skill of riveters. We have had a single rivet gang drive as many as 800 rivets in the shell of a ship in a nine-hour day. Those would be about seven-eighths-inch rivets. The average drive of all the rivet gangs in the yard, in that same kind of work, would not be over 300 or 400 rivets. In other words, your good gang would drive twice as much as your average gang.

The CHAIRMAN. Do you find any difference in the number of rivets driven in your yards now and the number before this emergency came on, say a year ago?

Mr. POWELL. Oh, yes; the average has run down. It is always difficult to tell how much a change of that sort is due to loss of efficiency and how much it is due to different conditions. In one yard where we watched this average drive very carefully it ran down from about 36 per gang per hour to as low as 20, and then it started up again and got up as high as 40, and then it dropped down again

to 35. That represented a good many different things besides just the efficiency of the men. It represented a change in the character of work and it represented shifting around of the labor from one type of ship to another.

Senator VARDAMAN. You do not find a disposition on the part of labor to throw off on this work or to do less than they did before the war, do you?

Mr. POWELL. Senator, you have touched on what I believe is the crux of this whole situation. I have known the laboring man pretty intimately for a number of years, and I can always get along with him, and I have always found that where I can get a small number of them together and talk to them, that I could pretty near make them understand.

Senator VARDAMAN. That is because you are a laboring man yourself.

Mr. POWELL. Well, I am a working man, but, of course, this is the first time, certainly in my generation, that labor has gotten into a position where it feels that anything it asks for it is going to pretty near get, and that is the situation that it is in to-day.

Senator CALDER. What has caused that?

Mr. POWELL. The cause of that is simply because the demand exceeds the supply. Labor is in the same condition now that the steel business was in before the price of steel was fixed, when the steel manufacturer got any price for his steel that the man happened to be willing to pay, and it had no relation whatever to the value of the steel.

Senator HARDING. Is riveting done on the piece plan?

Mr. POWELL. I would like to just finish up about this particular thing, because this is really the most important thing that we have got to deal with in the whole shipbuilding situation.

Senator HARDING. Go ahead.

Mr. POWELL. I think that because labor has found itself in this position, that it has reached a point where it fails to appreciate the great necessity of the present situation. We find in our yards—and I had this report from each one of our yards all over the country: this is not common to any one locality or to any one class of labor—that the men did not get into the work and do anything like what they could do or anything like what we used to get out of our shipyards when we were down on a comparatively small basis, with labor that had been with us for a good while.

Now, personally, I believe that we are only beginning to get into this labor situation: that it is going to be the great big thing in this country for the next decade, and that whether it is handled well or whether it is handled badly, is going to be the thing that settles the future of the United States. I have been preaching for the last two or three months now that a campaign of education that will reach everybody in this country is the most vital need of the situation. I have heard Mr. McAdoo say that money will win the war, and I have heard Mr. Hoover say that food would win the war, and I have heard Mr. Daniels say that the Navy would win the war, and I have heard Mr. Hurley say that ships will win the war. I want to say to you gentlemen that the only thing that will win the war is the spirit of American labor, and if we can train American labor and a

the rest of the Americans to a real understanding of what this situa tion is and what the demands are on them, if we can get them t take the same interest in doing their work every day that I am takin in trying to do my work every day, we will get a whole lot more ship in the next few months than any one of us dares to dream.

Senator VARDAMAN. Don't you think that the reckless use o money and the enormous profits made by some of the manufacturer has been responsible somewhat for these excessive demands on th part of labor; that they insisted that they should have a part of it Don't you think that is true?

Mr. POWELL. I think unquestionably that is true, Senator; bu since the war began the Government has taken charge of the profit of manufacturers, and it has seen to it that these large profits are no made any more; through your excess war-profits tax you have bee able to control that.

Senator VARDAMAN. We may be getting it somewhat in hand now but we have not been altogether able to control it heretofore.

Mr. POWELL. You are coming pretty near it. I will say this abou big business in this country. It has certainly shown a splendidl patriotic attitude since this war began in all of the dealings I hav had with those people. There are exceptions, of course, everywhere.

Senator KIRBY. Your remark would indicate that while the Gov ernment has been able to reasonably control the business or profits o the manufacturers you have not gotten that idea into the mind o labor?

Mr. POWELL. That is it exactly. You have not controlled labo and you have got to do it. We do not have anything whatever t say to-day about how much we pay the various trades in our estab lishment. It is fixed for us by the Navy on their standard of navy yard pay on this coast, and on the west coast by the labor adjust ment board appointed by the President. This same labor-adjustmen board is now handling the wage question on this coast, and I under stand that there are going to be further adjustments, and ever adjustment is an adjustment up. This is not coming out of the ship builders' pockets. The United States Government is paying prac tically every cent of it, but the experience of every manufacture who has gone through a period of rapidly rising wage rates is tha unless you do something parallel with it you do not begin to get in creased production as you increase your wages. The men in any on of our plants who find their wages enormously increased are ver apt to decrease the amount of work they do, so that their net retur is not much more than it was before.

I believe that if a campaign of education could be started, starte by the President of the United States, because this is the bigges thing there is in this country to-day, and can be pushed with ever force of the Government and using every possible means of reachin the people—a campaign that would make any political campaig that was ever run look like a little piking affair, a campaign tha would put the best speakers there are in the country into every ship yard, that would use the organized forces of the women, that would use the moving-picture shows and the churches, and everything tha would reach labor to let them see what the country is up against an what they could do in this crisis—I believe that it would do more t build up your shipbuilding program than all the money you can pu

into it and all the wages you can give and all the training you can do put together. We tried that at the time the war broke out in one of our shipyards. We had Mr. Taft and one of the well-known war correspondents, and the mayor of Boston, and a number of other eloquent speakers, go into the shipyards and talk to the men. We had meetings nearly every noon, and I want to say that inside of two months it put a different spirit into that place. It is really one of the nicest illustrations of what can be done that I ever expect to see. I know we staved off a strike thereby that was imminent. But no one yard can do that sort of thing permanently and get the results. It is something that has got to be handled as a great, big movement, backed by the highest power in this land; and I want to tell you gentlemen that if you can start up that sort of a movement by anything that this committee can do, you will have started something really for the winning of the war.

The CHAIRMAN. Do you feel that labor itself would respond to it and understand the situation?

Mr. POWELL. I have not the slightest doubt of it. I have always made it a rule when I was at the shipyard to see any man who wanted to see me. Every man knew that the door was open; and the average American workman, as I have seen him and know him, is a perfectly decent sort of a fellow. He has plenty of intelligence, a good standard of education; and when you can get right down to facts with him you can pretty nearly teach him what is right. There are some forces at work that are not steering labor in the right direction, and something has got to be done to counteract them before they get a start.

The CHAIRMAN. Can the Labor Department handle that situation?

Mr. POWELL. I do not know. I know so little of the Labor Department that I do not know.

Senator CALDER. Has the Government so far done anything in that direction?

Mr. POWELL. The Emergency Fleet Corporation is considering it in a small way. I had a telegram this afternoon to meet two gentlemen who are going to do some work along that line in New York to have a talk with them about it.

Senator CALDER. In the contracts made by the Navy Department and the Emergency Fleet Corporation with the shipyards, in which it is provided that additional wages shall be paid by the Government, has not that tended to encourage strikes?

Mr. POWELL. I do not believe so, because the situation was such that, even if that clause had not been written into the contracts, the Government had the control of the wages anyhow, and everybody knew it. It was just one of those things that, whether you write it in the contract or not, we knew it and everybody knew it.

Senator CALDER. You think it is a good thing to have the Government control the wages?

Mr. POWELL. I think it is the only practical way to handle the situation. The question is too big for the shipbuilder to control it as an individual. We could not possibly get ourselves in a position to stop our work in one of our yards while we fought out a strike that was delaying the work in that yard, and therefore if we have lost our only means in the ultimate of controlling wages, somebody, some bigger power than we are, must step in and take that responsibility.

Senator CALDER. Has the Navy Department or the Shipping Board aided you in a financial way and made it possible for you to carry out any additional contracts?

Mr. POWELL. Yes; the Navy Department, of course, has done a good deal in this way. We are building certain plants for the Navy Department that become its property after the war, to carry out some of its work. I do not feel at liberty to say any more about it than that.

In the case of the Emergency Fleet Corporation, they are advancing a comparatively small amount of money—comparatively small in relation to the volume of business that we are doing—to provide certain facilities to increase the capacity of some of our plants. These facilities are the corporation's property—not our property.

Senator VARDAMAN. Mr. Powell, you have already stated it in a general way, but I wish if you can do so you would give me the average increase in wages since the war began.

Mr. POWELL. At the outbreak of the war in August, 1914, the average wage at Fall River was about $16 a week, and to-day it is about $30. I will check those figures up. That is a report that comes over my desk every day.

Senator VARDAMAN. I will say in explanation that you can add anything to your testimony that you desire.

Mr. POWELL. Very well, sir.

Senator VARDAMAN. What has been the increase in the profits of your business since the war came on?

Mr. POWELL. Well, this year just passed——

Senator VARDAMAN. I mean for the same year.

Mr. POWELL. Our profits in 1914 were just about the same as they are this year.

Senator VARDAMAN. Oh, you have not enjoyed that increase that has been given to labor?

Mr. POWELL. We have enjoyed the same increase, yes; but not in proportion.

Senator HARDING. You enjoyed it in 1915 and 1916?

Mr. POWELL. We had very good years in 1915 and 1916.

Senator HARDING. But under Government regulation in 1917 your profits were very much reduced?

Mr. POWELL. Yes, sir.

Senator VARDAMAN. What was the comparative increase of labor in 1915 and 1916?

Mr. POWELL. It is really somewhat difficult for me to answer your question, because these various companies were operating as separate companies during that period, and they are now operating as a single company. So it is a little hard to give you the exact figures.

Senator VARDAMAN. The point I wish to bring out is this: Have not the manufacturers enjoyed quite as great an increase in their profits as the men who did the labor since the war began?

Mr. POWELL. In our shipyards we have been putting our own money into the development of these properties ever since—well, six months after the war began, believing that this great boom in ship building was coming and expecting to get our money back in profits from the increased business at high prices that we believed we would be able to take. Now, of course, when the Fleet Corporation stepped in and commandeered our ships and forbade us to take any outside

contracts they cut us off from this return that we expected to get, and the consequence is that we have put a great deal of our own money into the shipbuilding development upon which we should earn a profit in addition to the profit that we could expect on what was in it when the war broke out. And this added capital investment was made with the expectation of paying for it out of profits, so that when the war was over we who are in the shipbuilding not for to-day or to-morrow but, we think, for many years to come, would have our plants on a solid business basis so that we could go ahead and continue in business and compete with the foreign shipbuilders and put America back on the map in shipbuilding.

Senator VARDAMAN. Are you not permitted to make those profits?

Mr. POWELL. We certainly are not. We are going to have a mighty hard time, I tell you, when we have paid our excess-profits tax to get ourselves into a really solid financial condition when the war is over. I am not making any complaint about that; that is our share in this war we are in.

The CHAIRMAN. You really feel, Mr. Powell, that we will be able to compete with foreign shipbuilders after the war?

Mr. POWELL. Senator Fletcher, no living man can tell what the condition is going to be industrially after the war, but I believe that the importance of this Nation controlling its shipping has been so thoroughly demonstrated during the war that neither Congress nor the Nation is going to be satisfied ever to see that business go out of this country's hands in the future. I do not know in what way this will be worked out when that day comes, whether the unpopular subsidy or some form of bounty will be necessary, or whether the labor conditions all over the world will have become so standardized that we will be perfectly well able to compete. That is something that no one can foresee.

Senator VARDAMAN. What would be the objection to the Government's owning these utilities?

Mr. POWELL. Well, it would just cost the Government considerably more to build the ships than if it were done by private individuals.

Senator NELSON. What are these ships that you are building? Are they fabricated ships?

Mr. POWELL. No, sir; we have never gone into the so-called fabricated ship idea. Personally I do not think there is very much in that. We are building duplicates of ships that we have already built, and building a great many of them. In other words, we are standardizing our ships, but not fabricating them.

The fabricated ship idea is not a new one, Senator. People who have been in the shipbuilding business for years have thought that out and studied it. Mr. Morse, in 1899, or before that, conceived this idea of fabricated ships. He studied the shipyards in this country and abroad—he was a bridge builder as well as a shipbuilder—and after a great deal of careful study he built the New York Shipbuilding Co., at Camden, N. J., with the idea of building the so-called fabricated ships.

Senator VARDAMAN. Just explain, if you please, what that means. I think I understand it, but I should like to have a clear statement.

Senator RANSDELL. And I wish you would draw the distinction between the fabricated ship and the standardized ship.

Mr. POWELL. The general idea of the so-called fabricated ship i that you will make all of your drawings and templates so that all o the pieces that go into that fabricated ship can be built anywhe and then can be brought together at the shipyard and assembled, an that they will all go together and give you a completed ship. In wh I call the standardized ship we apply that same principle to a certai portion of the ship, but we know from experience that after you hav applied it to a certain portion it does not work on the rest of th ship, and you have got to finish up the rest of the ship by the goo old-fashioned shipbuilding methods.

Senator RANSDELL. Some parts of the ship are fabricated, then?

Mr. POWELL. Oh, absolutely, on every ship. Mr. Morse built th shipyard and he fabricated his first two ships according to this car fully studied plan, and after he had fabricated them he tore dow half of them and threw them away, and he built the balance of tho two ships just like the shipbuilders had always been doing. Bu Mr. Morse did a great work, because he proved that a greater pr portion of the ship could be fabricated than anyone had believed u to that time, and to-day every shipyard in this country is using th same system that Mr. Morse developed. He tried to do the whol thing and found he could not, but he did demonstrate how far a shi could be fabricated.

Now, when I speak of a standardized ship I mean a ship that yo build over and over again just the same. When you set up a pla for that ship you know you are going to use that plan again an every man throughout your establishment is used to working on th plan.

Senator NELSON. Something like the Ford automobile?

Mr. POWELL. It is more or less like the Ford automobile, and ju as long as you can build the same ship over and over again most c the alleged value of the fabricated ship disappeared relatively.

Senator NELSON. Mr. Powell, you described a few minutes ago th form of your naval contracts. Are your contracts with the Eme gency Fleet Corporation for these commercial vessels of the sam type?

Mr. POWELL. They are generally of the same character, Senator.

Senator NELSON. As to compensation and percentage?

Mr. POWELL. Yes, sir.

Senator CALDER. May I ask one question before you leave this su ject? What do you think of the fabricated ship?

Mr. POWELL. Why, I think the gentlemen who are attacking th job are going to find out just what Mr. Morse found, that they ca fabricate a certain part of the ship but can not fabricate the res When they get started they are going to find they can fabricate part of the ship and then they will build the rest of the ship ju like the rest of us do.

Senator CALDER. When are they going to find that out?

Mr. POWELL. When they put up their first ships.

Senator CALDER. But have they not launched a good many already

Mr. POWELL. No; no so-called fabricated ships have been launched

Senator JOHNSON. Have they not launched some at Los Angeles There have been two launched, have there not?

Mr. POWELL. I am not familiar with the situation at Los Angeles That I can not tell you, Senator; I do not know.

Senator CALDER. Evidently you do not think very much of the scheme?

Mr. POWELL. I do not. I think there has been enough learned in shipbuilding all over the world so that nobody is going to step into this business and find some wonderful way of increasing the ease and facility of construction.

Senator JOHNSON. Do you think our whole program of fabricated ships is going to fall down?

Mr. POWELL. Not at all; I think it is going to slow up. I think when they start putting those ships together they are going to find they will not go together.

Senator JOHNSON. Does that mean beginning all over again?

Mr. POWELL. No; that means building the ends of the ships according to the present methods. Practically what we do is to start amidships of the ship and use the so-called fabricating principle for a considerable part of the length toward both ends; but when you get to the ends you have to go back to the old shipbuilding system.

Senator JOHNSON. Are you aware of the fact that the major part of the contracts for our ships are for fabricated ships?

Mr. POWELL. No; I am not really familiar with the details of how the contracts are made.

Senator JOHNSON. The contracts at Hog Island, the contracts with the Submarine Boat Co., the contracts with the Merchants Shipbuilding Co. are all for fabricated ships, and those constitute the major part of the ships that are contracted for.

Mr. POWELL. I think those gentlemen are going to learn a good deal more as they live a little longer.

Senator JOHNSON. The work will probably be delayed some months?

Mr. POWELL. I think that would be my own judgment, that it will delay the completion of those ships while they are finding out what they can do and what they can not do.

Senator JOHNSON. And, as well, result in a great loss financially?

Mr. POWELL. I do not believe it is necessarily a very great loss financially. I think the question of delay is much more important.

Senator JOHNSON. I agree with you; the question of delay is much more important. But do you think the result would be, first, the delay, which is the important factor, and second, the financial loss?

Mr. POWELL. Yes.

Senator VARDAMAN. Mr. Powell, have you thought anything about building ships of concrete?

Mr. POWELL. Yes; I have, Senator Vardaman; but only in a more or less cursory way. I missed the opportunity to see one large concrete ship that was practically ready for launching just south of San Francisco while I was out there. That ship is being built by a private contractor. It is a steamship of about 5,000 tons. I am not very hopeful about the practicability of ocean-going concrete ships. I want somebody else to cross the ocean two or three times in them before I do. And I do not believe that in normal times they could be built on a basis that would compete with the steel ships. Of course, if they can be built at all to-day we want them, because we want everything that will float and go across the ocean.

Senator VARDAMAN. Do you not believe the supply of steel a lumber is sufficient to build all the ships that we can get labor put together?

Mr. POWELL. Without any question. There is no shortage in tl country of steel or lumber that will limit the production of shi The limit of the production of ships is going to be labor.

Senator VARDAMAN. So you do not think the matter would hastened or facilitated in any way by the building of ships of cc crete? You think there is nothing in the argument that by t utilization of that material the building of our merchant fleet wou be hastened?

Mr. POWELL. It seems to me that that is so highly experimen that to go ahead with concrete ships on anything but a very sm scale would be unwise at the present time; that if these few concr ships that are nearing completion could be rushed to completion a tested in actual service we could then tell five or six months from n whether they were practicable and whether it was a loss or savi we were about to embark on.

Senator VARDAMAN. Your idea is that this is no time for a experimentation that requires any great amount of labor to do it!

Mr. POWELL. That is exactly my idea.

Senator RANSDELL. But, Mr. Powell, in such a progressive age this, and when we are spending such enormous sums to build a m chant marine, which you have indicated we ought to continue doi after the war, and when men who have studied concrete constructi and who have been in that business for years tell us it is absolut feasible, absolutely practicable, and that concrete ships can be bu at a cost of from two-thirds to one-half of what a wooden or st ship can be built for, would not you, as a scientific man, say that would be prudent business to test it out in at least a reasonable wa

Mr. POWELL. Absolutely.

Senator RANSDELL. You would not be willing to say, as an engin building steel ships, that we ought not to try this, would you?

Mr. POWELL. Absolutely not.

Senator RANSDELL. Would you not think, as a prudent busin man, that we ought to do that?

Mr. POWELL. Yes, sir; I would build half a dozen.

Senator RANSDELL. If private people think enough of it to bu one, can this great Government that is spending practica $2,000,000,000 on a commercial fleet afford not to build a few?

Mr. POWELL. I should think it a good thing to do, but I would into it very moderately at first.

Senator RANSDELL. That is what this committee voted two or th days ago should be done, and I hope it will be done.

Senator NELSON. As to these commandeered ships that you ferred to, was your company building them for foreigners or was t company building them on its own account to sell?

Mr. POWELL. We had a number of ships for American shipowne we had a number of ships for various foreign Governments; and had a number of so-called stock ships—I think seven stock ships alt gether—on our books at the time of the commandeering order.

Senator NELSON. Ships that you were manufacturing to sell?

Mr. POWELL. Yes, sir.

Senator NELSON. Now, these ships that you had under contract, either for our own people or for foreign Governments, that the Government commandeered, are you to get any bigger price for them from the Emergency Fleet Corporation than the original contracts called for?

Mr. POWELL. There are a few cases under negotiation, Senator, where there were special circumstances.

Senator NELSON. You had a contract price with these American owners, and with the foreign owners that hired you at which you were to build those ships, had you not?

Mr. POWELL. Yes.

Senator NELSON. Now, my question is, The Government having commandeered them, are you to get a bigger price than the original contract price from the Emergency Fleet Corporation for building those ships?

Mr. POWELL. That is a rather difficult question to answer categorically, because there are a good many things that enter into it. The Emergency Fleet Corporation is carrying all of the increased wages due to their own action: that is, if we increase our wages, they pay for it. That means we get more for the ships. The Emergency Fleet Corporation is paying for putting on gun foundations and putting in quarters for gun crews, an item that amounts to $50,000 or $75,000 a vessel, so that the vessels that are being turned over to the Government are not the same vessels that we originally agreed to build.

There are also certain cases, five or six ships altogether, where there are special reasons why the Emergency Fleet Corporation is negotiating at the present time with a view to paying us more money, but it will not be the Government's money. Any extra cost that is paid will be paid back to the Government by the original owners when they take their ships back from the Government.

Senator NELSON. That is, our own people?

Mr. POWELL. Yes.

Senator NELSON. But the foreigners will not?

Mr. POWELL. That does not occur in the case of any foreign ship.

Senator NELSON. They will not be turned back, as I understand it?

Mr. POWELL. No: that does not occur in the case of any foreign ship.

Senator NELSON. It does not apply to them?

Mr. POWELL. No: it does not apply to them.

Senator CALDER. I wish you would make that a little clearer. As I understand it, where the Government has commandeered these ships that you had in course of construction, for American owners or foreign owners, the Government pays to you the price you had contracted for with the men you were building them for?

Mr. POWELL. Yes.

Senator CALDER. And in addition to that they pay the increased cost of labor?

Mr. POWELL. Yes.

Senator CALDER. They pay the increased cost of material?

Mr. POWELL. No: where we were building on a fixed price contract that remains the builder's risk.

Senator CALDER. So that in many cases, or for in every case, these ships are costing more than they were originally contracted for?

Mr. POWELL. Yes: very much more; and in many ways that w can not see. For instance, there is this question of loss of efficiency We know the labor in our yards is certainly not over 60 per cent a efficient as it was three years ago—two years ago.

Senator CALDER. Do I understand that when you have finished th ships being built for private individuals the Government takes thos over and operates them?

Mr. POWELL. No; the Government has taken them over, and the turns them back to the original owners, making the original owner pay to the Government all the money that the Government ha paid us.

Senator CALDER. So that if the Government had let these ship alone the owners, the men for whom you were building, would hav got the ships a great deal cheaper?

Mr. POWELL. I do not know about that, Senator Calder. I hav an idea that most of our customers would have paid us a lot mor money to get those ships, even if the Emergency Fleet Corporatio had let them alone.

Senator CALDER. Some shipowners tell me that these ships ar costing them a great deal more than they originally contemplatec and they are helpless; they must either take the ships at the pric the Government says they must pay for them, or let the Governmen keep them.

Mr. POWELL. Yes; that has been the case as to a small number o ships where there were special circumstances.

Senator HARDING. On that subject of increased cost, returning t the labor problem, have you encountered any limitation of output o the part of any particular group of labor?

Mr. POWELL. Oh, yes. There are trades in various shipyards, nc the same trade—in the different shipyards there are trades that absc lutely limit their output. In one yard the drillers will have a har and fast rule that no man shall earn over 70 cents an hour; when h has earned at the rate of 70 cents an hour for the day he must qui In another yard the riveters must not drive more than a certain num ber of rivets.

Senator HARDING. What is that maximum?

Mr. POWELL. At the present time I can not answer that accuratel because I have not seen the managers of the different plants no for a month, and these things change very rapidly. The last time heard there was a maximum in one yard of, I think, $20 a day fc the gang. That was the gang's wages for the day. A riveting gan is composed of three men, the riveter, the holder-on, and the heate boy.

Senator JONES. Have these limit rules been applied since the wa and are they applied now by these labor organizations?

Mr. POWELL. In a few cases they were existent before the war. I the majority of cases they are rules that have come into operatio since the war. That is particularly true of the eastern yards. I d not feel that to-day that exists in so many trades as to be a seriou matter, and I think it is something that this standardization o piece-work rates will eliminate. The men fear, of course, that i they earn very big wages their rates will be cut. They are absolutel wrong about that, because we have made it a principle, ever since have had anything to do with shipbuilding in any capacity where

could control those things, never to reduce a rate. I am perfectly willing to say that there has never been a piecework rate reduced anywhere where I had the right to prevent it.

Senator NELSON. Are the men ready to do piecework instead of day work, or are they opposed to piecework?

Mr. POWELL. As a general rule, you have to educate the men to like it.

Senator NELSON. To like piecework?

Mr. POWELL. Yes. After they have tried it for a while and find it is fairly administered you can not break them away from it. For instance, in one machine shop we had three years ago no piecework at all. We gradually introduced a system whereby the men were given a certain number of hours to do a piece of work. If they did it in less than that number of hours, we payed them for the time they actually worked plus half of the time they saved. After the men found out we were going to play fair with them on that piece of work, where they had made a good killing, and that we would not cut the time, they took to that system in good shape. To-day I suppose we are doing 45 per cent of the work in that shop on that system. Up to the last raise in wages, although our wages in that shop had gone up 50 per cent, the cost of the work had not gone up at all.

Senator NELSON. Mr. Powell, is there any understanding or agreement, express or implied, among the men as to what the output shall be or what a man shall do in a day on a given kind of work?

Mr. POWELL. I was just speaking about that, Senator: in connection with the piecework there are certain trades in certain places where that is true.

Senator NELSON. I mean as to day's work. Do they not in some lines have an understanding?

Mr. POWELL. No; I do not know of any shipyards where there is any understanding on piecework. We get more or less work, largely depending on how good the supervision is.

Senator CALDER. I was inquiring a moment ago about the increased cost of the ships given back to the original contractors. Some of the shipowners have raised with me the matter of the charter fees. Do you know of any controversy about that in the Shipping Board?

Mr. POWELL. No, sir; I do not know a thing about that.

Senator CALDER. They stated they had contracts with shipbuilders to complete ships within a specified period. These ships have been delayed some 4 or 5 or 8 or 10 months. The shipowners are claiming the value of those ships in fees between the time they were to have been ready and the time they were ready. You do not know anything about that, do you?

Mr. POWELL. No: not a thing.

Senator JOHNSON. Are you aware that the success of our whole shipbuilding program depends upon the success of our construction of fabricated ships?

Mr. POWELL. I really am not very familiar with the distribution of tonnage; that is, how much has been put into yards using the so-called fabricating principle and yards that are building according to the ordinarily accepted shipbuilding methods.

Senator JOHNSON. Is the opinion you have expressed regarding fabricated ships generally held?

Mr. POWELL. By shipbuilders; yes. It is generally held by shipbuilders.

Senator JOHNSON. Has the matter been the subject of much discussion or general comment among the shipbuilders?

Mr. POWELL. Oh, yes. It is a matter that has been discussed almost every time shipbuilders have got together.

Senator JOHNSON. Has there been any scientific conclusion reached among the shipbuilders?

Mr. POWELL. No; there have been no discussions carried on with the idea of reaching a scientific conclusion. We, each of us, have our own opinions; and as I have swapped opinions with various shipbuilders, I find we all think about it just the same way.

Senator JOHNSON. Do you know who designed these fabricated ships and the parts that were to be built outside the yards?

Mr. POWELL. No; I do not know a thing about it. I have had nothing to do with that. I do not think it makes any difference who did design it; that is, as to whether it works or not.

Senator JOHNSON. You do not think any man could design it so it would work?

Mr. POWELL. It is not a question of designing it, Senator. We could take a ship and build her up from end to end, and then tear her down and send that ship to one of these fabricating yards, and they could not put her together again.

Senator JOHNSON. Do you know what parts are fabricated in these contracts that have been made; which are the greater part of the contracts that have been let?

Mr. POWELL. Only by hearsay—that they have carried this fabricating to very great extremes. That is the reason why I say they are not going to be successful where they have gone past the place where shipbuilding practice has shown fabricating to be feasible.

Senator JOHNSON. Do you know who are the particular engineers or experts in charge of the Submarine Boat Co. and the Hog Island yard, which are building the greater number of fabricated ships?

Mr. POWELL. No; I do not know who are in charge of those different propositions.

Senator JOHNSON. So that you have never talked with any of them?

Mr. POWELL. Yes; I have discussed it, but only to a limited extent, with the manager of the Submarine Boat Co.'s yard.

Senator JOHNSON. Has he the same opinion as you?

Mr. POWELL. Oh, no; he believes he is going to make it go.

Senator JOHNSON. Then there is a difference of opinion?

Mr. POWELL. Yes; but he is not a shipbuilder; he has been building bridges all his life.

Senator JOHNSON. And the men in charge of the Hog Island yard—they have been building what?

Mr. POWELL. I do not know what they have been building, but there are not any shipbuilders that I know of.

Senator JOHNSON. We are paying $7,000,000 or thereabouts for the "know how" there, so there must be some remarkable shipbuilders there?

Mr. POWELL. I am not in a position to answer that question.

Senator JOHNSON. It was a mere presumption that I asked anyway. But the situation that you suggest is one that has not before been suggested to me, and I confess it is very alarming.

Senator MARTIN. Have you talked to Admiral Bowles about this?

Mr. POWELL. No; I have not talked to Admiral Bowles.

Senator MARTIN. Or Admiral Capps?

Mr. POWELL. No, sir; I have not discussed it with Admiral Capps.

Senator JOHNSON. Have you discussed it with anybody on the board?

Mr. POWELL. Oh, I have discussed it with Mr. Piez since he has been in office.

Senator JOHNSON. He is not a shipbuilder, either?

Mr. POWELL. No; he is not a shipbuilder.

Senator JOHNSON. I believe you said in your testimony in the beginning that when you met Mr. Piez you were delighted, because he talked your language?

Mr. POWELL. Yes, sir.

Senator JOHNSON. I had gathered from that that he talked the expert language of the expert shipbuilder.

Mr. POWELL. We were talking business principles and labor questions, and those are common to all businesses. We were not talking about the technique of shipbuilding.

Senator JOHNSON. So that the language you speak in shipbuilding is not the one that he talked to you in, at all?

Mr. POWELL. We did not talk that particular branch of the language.

Senator JOHNSON. When you have talked with Mr. Piez have you discussed shipbuilding at all, outside of labor conditions and the like?

Mr. POWELL. Oh, yes; we have had a number of discussions over a very wide range of subjects. We have at the present time a committee that represents the Atlantic Coast Shipbuilders' Association, an association that nearly all the older shipyards on the Atlantic cost belong to. This committee of five members—Mr. Homer Ferguson, as chairman; Mr. Hand, president of Cramp's; Mr. Kneeland, president of the New York Shipbuilding Corporation; Mr. Downey; Mr. Hunter, as secretary; and myself, representing this association—meets in Washington every other Friday, and Mr. Piez and Mr. Hurley meet with us and spend a couple of hours discussing any questions that involve matters of policy for the Shipping Board or questions that are interesting to all the shipbuilders.

Senator JOHNSON. Do these gentlemen that you have named have the same opinion as you as to fabricated ships?

Mr. POWELL. Without exception, I think. I know Mr. Ferguson and Mr. Hand agree with me.

Senator JOHNSON. Did you gentlemen ever agree that that policy will be a failure?

Mr. POWELL. Do not misunderstand me, Senator. Those ships are going to be built. It is going to be merely a question of the expedition with which they are built. If you had built those same ships in the ordinary shipbuilding way it would have taken a long time to organize a force to build the enormous number of ships that is contemplated. Personally I know very little about Hog Island, but

I do know that to put the number of slips in one place that it is proposed to put there is a great shipbuilding mistake. It is a great manufacturing mistake. In our yards we do not go beyond a number of slips that will absorb ten or twelve or thirteen thousand men in one place. If we want to build more ships than we can handle in that place we go somewhere else and start over again, because when you get that size plant you have built what is the maximum size of economical shipbuilding unit.

Senator JOHNSON. The Fleet Corporation has just recognized what you have stated. In Mr. Piez's report he says it is a mistake to have 100 ways, as they had contemplated at Hog Island, and they have reduced it to 32.

Mr. POWELL. They ought to reduce it to 16; 32 is too many. Sixteen is too many. Ten is enough. Under special circumstances you might go to 15.

Senator HARDING. I do not want to seem to be analyzing your testimony, but I want you to harmonize two statements now. You spoke of the inevitable collapse of the fabricated-ship program. Am I stating that too strongly?

Mr. POWELL. Much too strongly.

Senator HARDING. We will say the disappointment of the fabricated-ship program.

Mr. POWELL. Yes.

Senator HARDING. In spite of that, you do believe that we shall have 3,000,000 tons?

Mr. POWELL. Yes; I think we are going to get our 3,000,000 tons.

Senator HARDING. In spite of that?

Mr. POWELL. In spite of that; yes.

The CHAIRMAN. Mr. Powell, as I understand it, what you believe will happen is about this: This fabricated material will come to the yard, and they will set the men to work on it to put it together. They will succeed in putting together a great deal of it, the greater part of it, but when they come to the ends they will find they can not make them fit exactly right. Then the question will be one simply of recutting these pieces and putting them up in the old way?

Mr. POWELL. That puts it very plainly and clearly, Senator.

The CHAIRMAN. So it is not a failure nor is it an impracticable thing as a whole, but it might cause some delay if they had to learn the "know how" again?

Mr. POWELL. Certainly. Nobody ever said that Mr. Morse made a failure of the New York Shipbuilding Co. because his ships would not work. He simply learned how far he could go, and went ahead and built the ships. It delayed his first ships a good deal and they cost considerably more money, but then he went ahead and those ships were built.

Senator VARDAMAN. What character of failure would be more disastrous than delay?

Mr. POWELL. It is very disastrous; a delay at this time would be very disastrous. There is no question about that.

Senator VARDAMAN. That is what you mean by the fabricated ship being, in your judgment, a failure?

The CHAIRMAN. He did not say "failure."

Senator VARDAMAN. Not that they will not finally finish the ship, but there is delay in time of construction, and necessarily consid-

rable cost in the readjustment or remaking of that particular piece of material in the construction of the ship.

Mr. POWELL. I think it is extremely unfortunate, Senator, that the people who had spent their lives in shipbuilding did not have a chance to go into consultation when this subject of fabricated ships was under consideration, because that was the time to stop it. Anything you do now to change it is only going to make more delay.

Senator VARDAMAN. It has been developed here that a great many people have gone into this business who knew nothing in the world about the technical or practical side of shipbuilding.

Mr. POWELL. That is as it has seemed to people who have spent their lives in shipbuilding, Senator.

Senator VARDAMAN. For instance, there was a ship being constructed by a private company for $385,000, and the Government took it for $490,000. It is evident to my mind that the representative of the Government who took that ship over at $105,000 more certainly did not know what he was doing or he was not true to the Government. That has been brought out in the testimony here.

The CHAIRMAN. Let me ask you one question here, Mr. Powell. You have said that it was a mistake, in your judgment, to put into one plant more than 16 ways, and this Hog Island plant ought to be reduced really to 16 or thereabouts; that 10 would be better, not exceeding 15 anyway. Do you not think it was likewise a mistake to locate three great shipbuilding plants within a radius of 50 miles of each other in an already congested industrial center?

Mr. POWELL. I should say that was a great mistake, that they should have been spread over a much larger area.

Senator NELSON. Mr. Powell, how many of these commandeered ships will be ready within the next six months?

Senator HARDING. I think he has stated that.

Mr. POWELL. I said 40 per cent of the year's tonnage.

Senator HARDING. He said, about 160,000 tons, if I remember right.

Mr. POWELL. Yes; that is about right.

The CHAIRMAN. Do you have much trouble with labor leaving one yard and going to another—the turnover of labor—or do they stay pretty well?

Mr. POWELL. In some of our yards we are having a good deal of trouble with that, in others none at all. The Union plant, in San Francisco, has apparently not been very much bothered. The Sparrows Point plant has been considerably bothered. The Harlan plant has been considerably bothered. Fore River has been very little affected. It has been more or less a local question. Those yards that were nearer the congested Philadelphia district have had most trouble, because there has been this big flow into that particular district on account of the very abnormally high wages that have been paid there. Five years ago, when I was in Philadelphia at Cramp's, that was the lowest shipbuilding wage market there was in the country, except Newport News, and to-day it is the highest except the Pacific coast, and they run even higher on some trades than they do on the Pacific coast.

The CHAIRMAN. I want to ask you a question in regard to concrete ships from a scientific standpoint, you being an expert. What difficulty would you apprehend in the concrete ships?

Mr. POWELL. I am not an expert on concrete, Senator Fletcher; that is something I know little about. But I have noticed concrete structures cracking that I have been connected with, and I can not imagine going across the ocean in a ship that might crack at any minute. That is one thing that has been bothering me.

Senator CALDER. But do you not think, Mr. Powell, it would be a good thing to build a couple of concrete ships and give them a good test?

Mr. POWELL. Absolutely; I would not miss any possible bet.

Senator CALDER. Mr. Powell, have you ever been called into conference with the Shipping Board at any time to work out shipbuilding problems?

Mr. POWELL. Since Mr. Piez has been in office we have had these committee meetings that do serve just that purpose, Senator Calder.

Senator CALDER. How long have you been having these meetings?

Mr. POWELL. We had our first meeting early in December, not very long after Mr. Piez came into office, and I think they have met with us about three times since then, and now this is a permanent arrangement.

Senator CALDER. What do you discuss?

Mr. POWELL. Any question that affects shipbuilding or the policy of the corporation that they want the judgment of shipbuilders on, or any question we want to bring up for consideration or settlement.

Senator CALDER. Who suggested these meetings? Do you know?

Mr. POWELL. It was worked out in this meeting at Philadelphia that I spoke of, the first time that Mr. Piez asked the shipbuilders to meet him. I think he said at that time that he would like to have some way of getting the benefit of the advice and criticism of the shipbuilders, and we then told him this committee had been appointed only a short time before that, and he asked us to go back to the Atlantic Coast Shipbuilders' Association and get from them authority to officially represent the association. So, shortly after that we called a meeting in New York, when the association did delegate this authority to this committee, and the committee then met in Washington and informed Mr. Hurley and Mr. Piez that we had been given this authority to represent this association, and these meetings were arranged.

Senator CALDER. So that until early in December, as far as you know, no practical shipbuilders of importance had ever been called into conference to determine upon the shipbuilding policy?

Mr. POWELL. Certainly none of the people connected with our office had been, except in a very cursory way. What happened as to the other shipbuilders I do not know.

Senator MARTIN. Did you not come in contact with any representative of the Shipping Board that was an expert shipbuilder?

Mr. POWELL. No; not at these meetings.

Senator MARTIN. The Shipping Board was represented by people without knowledge of shipbuilding?

Mr. POWELL. Oh, yes.

Senator HARDING. You were emphasizing the importance of the labor problem. Has that ever been discussed at these conferences?

Mr. POWELL. Yes; we have given up a good share of our discussions to the labor problem. At the last meeting I asked Mr. Hurley particularly to use every possible effort to start this campaign of education that I spoke to you about to-day.

Senator HARDING. Has there ever been discussion there as to the feasibility and advisability of stabilizing wages?

Mr. POWELL. Yes; that has been given a great deal of consideration, and we have discussed the subject at every meeting. I suppose we have spent more time discussing that subject than any other.

Senator HARDING. Has it ever been suggested that you should go to the governmental authority that deals with the wage question?

Mr. POWELL. I do not believe it has.

Senator CALDER. Mr. Powell, how is the Shipping Board financing this shipbuilding scheme? Are they making advances to the shipbuilders as the work progresses?

Mr. POWELL. Not in our contracts. Speaking now of the new contracts taken directly from the Fleet Corporation, they deposit a sum of money at a specified bank in the vicinity of the shipyard, and when we have spent money for a certain purpose in connection with their ships we get it back, upon presentation of proof that we have made the expenditure from this sum in the bank. These checks are countersigned by their representative in the vicinity before we can get our money back.

Senator CALDER. Mr. Powell, shipbuilders have complained to me that in building ships for the Shipping Board they are having great difficulty in financing their operations. In other words, the Shipping Board is not willing to advance a sufficient amount on their labor and material, as the work goes along, and in the large undertaking we are in they are on the edge of financial difficulty all the time—even shipbuilders that are pretty sound.

Mr. POWELL. We had a great deal of difficulty when the ships were first commandeered last August. At one time the Emergency Fleet Corporation owed us on payments overdue anywhere from one to six weeks considerably more than $1,500,000. That was just the Fore River Shipbuilding Corporation alone. It did cause us a great deal of difficulty in that time, but the payments go through much more smoothly now, and the treasurer has not complained to me since I have been home from the West.

Senator CALDER. Of course you know how difficult it is to borrow money to-day. It is practically impossible. Do you believe the best interests of the Government would be served by advancing to responsible shipbuilders up to the very limit of the work they perform?

Mr. POWELL. It is really essential.

Senator CALDER. It must be done.

Mr. POWELL. It is really essential to the rapid prosecution of the work.

Senator CALDER. It is very essential, is it not?

Mr. POWELL. It is very essential.

Senator JONES. You said a while ago they were advancing to you some money for the extension of certain facilities in connection with your plant?

Mr. POWELL. Yes.

Senator JONES. And that these facilities would belong to the corporation. What benefit will they be to the corporation after the war closes?

Mr. POWELL. Some of them will have considerable value and some of them none. That depends entirely on the facilities. If it is a locomotive crane, for instance, and locomotive cranes are in considerable demand, it will be all right. If it is some piling put in to build a ship on, practically it is not worth much of anything. But it is provided that these various items will be appraised, and if the shipyard can use them the shipyard then takes them at the appraised value. It is only in case they have no value to the shipyard that the Government practically has them on their hands.

Senator CALDER. Mr. Powell, have you any suggestions to make that would be of benefit to this committee or the Shipping Board in expediting the building of ships?

Mr. POWELL. Yes; I have just one thing to say, and it is simply to repeat what I said before, that if I can make this committee just feel a small part of what I feel about the necessity of this education of the labor and get them to start something in that line it will be the best day's work I have ever done in my life. I believe that is the crux, the heart and soul, of this whole question; that it is the most vitally important thing that there is before the American people to-day.

Senator CALDER. Mr. Powell, have you thought of the wisdom of commandeering labor?

Mr. POWELL. Personally I do not believe it is practicable. I went to a meeting not so very long ago, where a labor man got up, a man high in the councils of labor, and he told the shipbuilders that you could commandeer labor but you could not make them work.

Now, if you want to accomplish things in this world, you have got to have people with their heart and soul in what they are doing. The only way we can build ships is to have the men want to build the ships—I mean to really build ships—and anything you do that takes away from labor that spirit, that desire to put the best that is in them into their ship, is going to defeat the end we are after. I did believe in the early stages of this war that probably that was the way to solve the proposition, that they ought to start with me and commandeer everybody down the line, but the further this situation has developed the more it has been borne in on me that that is not the way to get the best results; that if you can not get something more than what you force a man to give you are not going to get very far.

Senator JONES. It has been stated in some localities that it would be wise to fix the rate of wages, with the definite understanding that there would be no change for a certain length of time, say, three months or six months or a year. What do you think of any such suggestion as that?

Mr. POWELL. I thoroughly believe in that. I think the Navy Department has handled their wage situation at the navy yards for a number of years in about the best and cleanest way that any Government could have handled the wage situation. Those wages at navy yards were supposedly based on prevailing rates of wages in the vicinity. They never did really use the prevailing rates; they always jacked them up a certain percentage, but they never let the wages in any yard run away from the standard in that community. Those wages were set twice a year, and they stuck, and a man when he went to work in a yard knew that the wage he had was going to

be the wage he would get for the next six months, except in the most exceptional circumstances. And there was always plenty of labor that wanted to work in the navy yards. They did not know what labor trouble was until a very short time ago in the navy yards. I think the stabilizing influence of having those wages fixed and letting it be known that the Government is behind them is a splendid thing.

Senator JONES. And you think that that, in connection with the educational campaign you referred to, would help the situation very much?

Mr. POWELL. I think that will solve the labor situation. I think it will not help it, but solve it.

Senator HARDING. You said a moment ago that the navy yards never had any trouble heretofore, but inferentially I gather that they have had recently. Why the change?

Mr. POWELL. Of course the labor in navy yards is like labor everywhere else all over the country. They came to the conclusion that if they made a little trouble they would get an increase in wages, and they were right; they made the trouble and they got the increase in wages.

Senator HARDING. Is the inference from that statement this, that we need a little firmness in treating the situation?

Mr. POWELL. I think the labor situation from now on has got to be handled with absolute firmness. When a schedule of wages is laid down it has got to be lived up to.

Senator MARTIN. That may do in time of peace, but in the situation the country now is in they can not afford to be firm.

Mr. POWELL. Senator, you have got to be firm; you can not afford not to be firm. Giving way does not get you anywhere; giving way simply accentuates your troubles. If the men know that every time they kick they will get more wages, they will spend all their time in kicking and none of the time in working.

Senator MARTIN. I think that will operate in time of peace, but I do not think this country is in a position now to say arbitrarily they will not meet a demand.

Mr. POWELL. But if you adjudicate your wages on the basis of the conditions that exist to-day there will be no change in conditions, in my judgment, that will warrant another revision of those wages for six months. And if you say those wage schedules are going to hold for six months and then be revised to meet the conditions that may exist at that time, I think the Government is perfectly justified in saying they will not make a single change. And I do not think any decent laboring man who understood the situation would refuse to work for those wages and under those conditions. And there is where that campaign of education that I spoke of comes in, because when you reach the workingman and let him see just what his share in this war is you will overcome the necessity for using any other means.

Senator CALDER. If the President got back of this policy——

Mr. POWELL. If the President got back of this policy and pushed it, I do not think you would have any labor trouble.

Senator VARDAMAN. I think you are entirely right about that. If you deal with them candidly and honestly they will respond.

The CHAIRMAN. We are very much obliged to you, Mr. Powell. We are very glad you came, and thank you for your suggestions.

We have two other matters to take up. Mr. Cotton is here. We will hear him a little later, but Senator Bankhead has some witnesses, and we will proceed with them first.

STATEMENT OF HON. JOHN H. BANKHEAD, A SENATOR FROM THE STATE OF ALABAMA.

Senator BANKHEAD. Mr. Chairman, I am very much obliged to this committee for giving me an opportunity to present a matter about which this committee has heard a good deal and with which you have always dealt very liberally. I refer to the situation on the Warrior River in Alabama and the harbor at Mobile, for which approximately $20,000,000 has been appropriated for the purpose of improving that river from Mobile Bay to the upper reaches of the coal fields in Alabama. The improvement and canalization of the river has been practically completed. There is 450 miles of that river, extending, as I have said, to the upper reaches of the coal fields, that is now perfectly navigable. It is an every-day river. It has a minimum depth over the miter sills everywhere of 6 feet. It never freezes and it never dries, so it is as reliable for the purposes of comerce as a railroad track, if you put the facilities there for handling the commerce.

Now, we have heard so much in the last week or more of the desperate situation in the country with reference to railroad congestion and the inability of the Fuel Administration to secure coal at the ports or for distribution at other points, and I have felt that I ought to bring this matter to the attention of this committee. I might say that we had a conference this morning, myself and some gentlemen from Alabama, with the Fuel Administration, with the Shipping Board, and with the Director of Railroads, Mr. McAdoo. We had a joint conference and discussed this whole question, and I am authorized to say that they are all very deeply interested in the practical use of the Warrior River as a medium of commerce, and especially for the heavy forms of freight, like coal, steel, and iron.

I want to show this committee exactly what the situation is on this river [exhibiting a map]. This red line is the improved, canalized river, with 6 feet over the miter sills every day in the year, as I have said.

Now, at the uper end of this improvement, within 6 miles of the upper end of the improvement, there are two mines, producing together 2,500 tons of coal. The gentleman who own this property two or three years ago conceived the idea of putting in a tipple here and having the railroads bring the coal around here a short distance and deliver it on the river, in order that it might be carried down on barges. They made an agreement with the railroad that they would bring this coal around there for 15 cents a ton. They spent $20,000 or $25,000 building branch roads and putting in that tipple, and about the time they were ready for the use of the river the railroad raised the rate to 25 cents a ton, because the railroad associations made some complaint, and they could not carry out their contract.

I have a report here made by the president of the Engineering Society of England, who was directed to make a thorough investi-

gation of this field, this particular coal, and this river. And he compares the coal with the famous Pittsburgh seam, the New River seam, and the Pocahontas coal, for bunker purposes and for other purposes. He gives an analysis of each, and the result of the experiments made by him; and he emphatically says in his report that the Sipsey coal is superior to either of those I have just mentioned, for bunker purposes, and I have no doubt that is true.

Now, the gentleman asked me as to the condition that exists on the Warrior River; and I ought to have said before that on this red line on the map [indicating] the coal outcrops all up the river; it is not, perhaps, as good a coal as the Sipsey coal and the other coals up the river, but it is a good steam coal for ordinary purposes. It outcrops all the way up the river. There would be no trouble in opening mines all the way up.

The question may suggest itself to the members of the committee why private capital can not be induced to embark in this work? The reason why they can not get private capital in the work is very simple. In the first place, the coal operators in Alabama for the last seven or eight years since this improvement has been completed have had a very hard time of it. The coal sold very cheaply, and they have not made any money. When the war came along they began to make money; but then the Fuel Administration fixed the price so low that there was no profit in operating the coal.

Senator VARDAMAN. The Fuel Administration fixed the price so low that it fixed them, did it?

Senator BANKHEAD. Yes; so low that it fixed them. And that is the reason that private enterprise has not gone into the transportation of coal on this river.

What I have done, and what I want the aid of this committee in having done, is this: If it is necessary, at the proper time, I am going to ask this committee to pass a resolution to request the Shipping Board and the Fuel Administration to investigate this matter—to look into it thoroughly and see whether or not a fleet of barges and boats can be put on the river and operated so as to deliver coal to Mobile, 5,000 tons a day, perhaps, at a cost of not over 50 cents a ton.

That was one of the reasons I had in mind in asking this committee to give us this opportunity to be heard.

It would be necessary, of course, to build some barges, 500-ton wooden barges. That is the kind they have on the river now and are using. Those barges can be built cheaply, and they will answer every purpose. There would also have to be some towboats constructed, which would not cost very much. They could be built right on the banks of the river; and at the present time there are quite a number of barges and towboats at Mobile and at New Orleans which are not in the trade for the reasons that I have mentioned. The United States Government could commandeer, or requisition, or buy at a very reasonable price and in a very few days, or a few weeks at most, those barges and towboats.

And in that way the Government could have a fleet on that river that could be used for carrying to Mobile very large quantities of good coal—I would not undertake to say how much; the amount of coal that they could carry in the future is unlimited so far as that is concerned, because there is the river and there is the coal; and all

that is necessary is to put the barges on and to provide the towboats to move the fleet of barges.

Senator SHERMAN. Do you know the thickness of the veins?

Senator BANKHEAD. They are from 26 inches up to 7 feet; many of them are 7 feet. What is known as the Big Seam is 7 feet; some of it is 9 feet. But in the case of this high-grade coal the seam is not so thick. This coal that I specifically refer to has an average thickness of 28 to 30 inches. It is rather an expensive coal to mine, owing to the thinness of the seam; but its quality makes up for any disadvantage arising from that.

Senator HARDING. Are there any barges on that river now?

Senator BANKHEAD. Yes; those barges which are carrying coal from this field [indicating on map] to Mobile.

Senator HARDING. What is the Government price for that coal fixed at the mine?

Senator BANKHEAD. Well, it varies; that depends upon the thickness of the seam and the quality of the coal.

Senator HARDING. Well, can you give it to us in round figures?

Senator BANKHEAD. Well, I think about $2.60 is the average at the mines of the thick seams.

Senator VARDAMAN. Senator Bankhead, is there any that is quite so low as that?

Mr. DANNER. It is $3.10.

Senator BANKHEAD. $3.10 is about Mr. De Bardeleben's price. $3.10 is the price for this high-grade coal that I have been telling you about. And one of the most reliable operators there tells me that they can not make any money out of it at that price, owing to the difficulties of transportation.

Senator HARDING. What is the cost of mining coal down there?

Senator BANKHEAD. At Lehman's mine, where the seam is 26 inches thick, how much does it cost, Mr. Danner?

Mr. DANNER. The cost of mining it is 80 cents a ton; and the overhead charges and various other things run the cost up until they make nothing at that price.

Senator BANKHEAD. I know that they make nothing at the present price fixed by the Government.

Senator HARDING. You say you pay the miners 80 cents a ton for mining the coal?

Mr. DANNER. Yes, sir.

Senator HARDING. And the Government price is $3.10 a ton?

Mr. DANNER. Yes, sir.

Senator BANKHEAD. The price fixed in the thicker seams is about $2 or $2.05. And I am surprised to learn that he gets his mining at 80 cents, because they are paying that in the thick seams. But I suppose he is right about that.

But whatever the cost may be, the cost is not the most important question. It is a question of getting the coal to the market; it is a question of getting the coal away from the mines when it is dug out, because you can not store coal; you have got to ship it out.

And what we want the Government to do is to put a fleet of barges on that river that will enable the operators to send their coal away properly when it is mined; a sufficient number of barges and towboats to carry at least 5,000 tons a day, if necessary.

On this river you can make a round trip in six or seven days. You can carry three barges of 500 tons' capacity each with one tow. That is equal to 30 carloads of coal. If you send that coal by rail, it would take a railroad train carrying 30 freight cars 40 days to make the round trip—and you can not get the cars to do even that.

Senator JONES. If they were allowed a reasonable price for the coal, would private interests put the barges and towboats on the river?

Senator BANKHEAD. They are not able to do that; they have not the money. It would take a great deal of money to put a fleet of barges and towboats on this river that would be able to go down the river and carry the coal. They can not borrow money down there for that purpose. And the expense of keeping up their equipment, and the increased expense of all the material that goes into the mine, rails, pipe, powder, and labor and everything else, have made it so that they are not making any profit, or are making a very small profit. And nobody is going to lend any of those people money to go into an enterprise of that kind, which is more or less of an experiment.

Senator VARDAMAN. What has been the output of those mines that has been carried on the barges for the last few months?

Senator BANKHEAD. Well, it has not all been carried on the barges. Those two mines at the head of navigation, within a few miles of each other, are putting out now 2,500 tons of coal a day, and that is high-grade bunker coal.

Senator NELSON. Does any of that now go by barges?

Senator BANKHEAD. Only a small proportion; they have not a sufficient number of barges to carry it.

Senator RANSDELL. There is only a very limited number of barges on that river.

Senator BANKHEAD. Yes; a very limited number.

Senator RANSDELL. And it is only a short time since the improvements of the river were completed?

Senator BANKHEAD. Yes.

Senator RANSDELL. And our people down there are not accustomed to the operation of barges.

Senator BANKHEAD. Our people are not accustomed to river navigation; they have never had money enough to invest in a fleet of a sufficient size to conduct their business. But they have been experimenting along those lines. They have four or five self-propelling barges, which belong to a man from Boston, Mass., and they have been sending this particular coal to New Orleans on those. It goes down the river to Mobile, and from there it goes through the sound and Lake Borgne to Lake Pontchartrain, and they deliver the coal to New Orleans.

Now, a wooden barge such as is used on the river, and which I think ought to be used to deliver a large amount of coal, can not make that voyage to New Orleans; the water is too rough.

Senator RANSDELL. If the Government takes all the ocean-going commerce and all the railroad commerce of the country—and it is literally taking all of that over now—do you think you could get any private capital down in Alabama, or in that section of the country, to build those boats and barges to carry that coal?

Senator BANKHEAD. I know that we can not do it; and that is the reason why I am here urging the plan upon this committee.

Senator RANSDELL. Would it not be rather foolish for private capital to embark in that enterprise in competition with the Government?

Senator BANKHEAD. I think so. I may say that the Shipping Board is perfectly willing to build these barges; I am satisfied of that; they are perfectly willing to put on the towboats and the barges. And the Fuel Administration is anxious to have this coal carried to Mobile for bunker purposes. The idea underlying that is that if we can get bunker coal delivered at New Orleans they can divert some of the trade that has been going to New York and other ports in the East and congesting the facilities of those ports.

They have now 27 feet of water in Mobile Harbor, and almost any ocean-going vessel can come up into the harbor and take on this coal and carry cargoes abroad; there is a large amount of material that they could export from there; but there are no ships down there because they have been sending everything to New York and other eastern ports.

Senator RANSDELL. And is it not a very easy matter to get that coal to New Orleans when it is brought to Mobile?

Senator BANKHEAD. Yes. And it would also be a very simple matter to get it to Pensacola, Fla., or to Cuba.

I am now going to ask the committee to hear Capt. A. C. Danner, of Mobile. He is one of the pioneer coal men of Alabama. He built wooden barges 50 years ago; he took the coal out of the banks of the river, built the barges, and had them floated down the river during the rise of the water, and that is the way he got his coal to Mobile. He has been in the coal business in Mobile ever since, and he has had more export business and more bunker coal business than any other man in Alabama. Everybody in Alabama knows Capt. Danner, and they know that he is reliable and worthy of confidence. I would like for the committee to hear him for a few moments, so that he can tell what the situation is. I had expected Mr. Call, of Tuscaloosa, to be here this afternoon. He is one of the largest sawmill operators in Alabama. I had him tell the Shipping Board about the southern long-leaf pine lumber. They can build both barges and towboats down there. They have the river on which to bring whatever material they need for that purpose, and they can very soon build a fleet of barges and towboats and have them on that river within a very short time carrying great quantities of coal down the river that now has to go by rail, if it goes at all.

And I need not tell the members of this committee what the railroad situation in this country is to-day and how anxious everybody is to relieve that congestion.

And here we have this river on the improvement of which we have spent $15,000,000, and it seems to me that we ought to use it when the use of it would be of such great benefit to the country in this emergency.

It may be said, of course, that private capital ought to do this. Well, perhaps that is true; but conditions now are such that private capital would not invest in it even if they had the money, because everything is too uncertain. We do not know what will happen; we do not know what day the Government will take the thing over and operate it. So that if you are going to use that river and are going to get that immense amount of coal that is so very much needed at

Mobile, and New Orleans, and Galveston, and Cuba for local consumption it will have to be carried down that river on barges. And in order to do that the Government will have to put that fleet of barges on the river, which the Emergency Fleet Corporation is perfectly willing to do.

And in that connection I should say that Secretary McAdoo, the Director General of Railroads, has said that whenever the fleet of barges was put on the river he would aid the plans so far as he could by making the railroads down there cooperate with the mines which are not situated immediately on the river.

Senator VARDAMAN. How long would it take to have those barges built and running on the river?

Senator BANKHEAD. We have a fleet of barges down there sufficient now to begin the work with.

Mr. DANNER. There are 31 wooden barges.

Senator BANKHEAD. Thirty-one wooden barges, including five self-propelling barges. We have three or four towboats ready to put on the work.

Senator HARDING. Are they in operation now?

Senator BANKHEAD. No; they are tied up.

Senator HARDING. Why are they tied up?

Senator BANKHEAD. They are tied up for the reason that I have just explained. Private capital can not employ them in the business; they do not belong to the mine operators, you know.

Senator HARDING. Well, I do not like to be dense about the matter; but why are those boats not available to the mine owners?

Senator BANKHEAD. They would be available to the mine owners if the mine owners had any assurance that they were going to be able to use them.

Senator HARDING. Are they not leasable, or anything of that kind?

Senator BANKHEAD. They might be leasable.

Senator HARDING. In other words, what good would it do to put on more barges, if you are not using the barges that are already there?

Senator BANKHEAD. The barges are not used for the reason which I have explained. There is first, the railroad situation; the charge of 35 cents a ton for hauling this high-grade coal a few miles to the tipple—that is one reason. When you add to that the cost of transportation of the coal down the river, and the expense of mining, the total cost is about equal to what they can get for it.

Senator JONES. If the Fuel Administration would allow them to charge for that coal a price sufficient to cover that high cost of hauling, would not the people down there be justified in putting the necessary barges on the river?

Senator BANKHEAD. Yes: if the Fuel Administration would do that.

Senator JONES. Well, why will they not do it?

Senator BANKHEAD. Well, that is a question. And if the Fuel Administration did allow that the number of barges is not sufficient to accomplish the results desired. You would have to have barges sufficient in number to make a round trip every day.

Senator JONES. Would not such action by the Fuel Administration induce the people who own the barges at present to increase the number of them?

Senator BANKHEAD. I do not think so. They have not the necessary money.

If you want that river to be used for this purpose it will be necessary for the Government to put a fleet on the river that will make a round trip every day; to have a barge, with its towboat, ready every morning or every night to leave the mines; have it go down to Mobile and the tow be discharged there, and take empty barges back to the mine, so that they will not have to stop the mine.

Senator HARDING. I want to ask this question: A good deal of this proposition sounds feasible; and I confess having a ready sympathy with anything that is going to help in relieving the fuel situation; but I want to ask you, in the confidence that I have in your judgment, is where are you leading us, in the policy that you are proposing?

Senator BANKHEAD. Well, I am not discussing that on a matter of general policy.

Senator HARDING. But every man must be able to answer this question when it comes up.

Senator BANKHEAD. I will say in that connection that I have had to do so many things in the last 12 or 18 months that I did not think I would ever do that I am ready to do now whatever appears to be necessary—and I want to help win the war by giving the country a sufficient supply of coal.

Senator HARDING. Very well. Suppose, without arousing any of our selfish interests in the matter—suppose I came in here and asked for $1,000,000 worth of barges and tows to be placed on the Ohio and Kanawha Rivers?

Senator BANKHEAD. I would be ready to help you get that, if you could make the use of it that we can.

Senator HARDING. I like your scheme, but I am overwhelmed by the possibilities that it involves; that is all.

Senator BANKHEAD. I know we are all overwhelmed by the present emergency.

Now, I will ask Capt. Danner to make a brief statement with regard to the situation in Mobile. As I have said, Capt. Danner is a pioneer coal man in Alabama; he carried the first coal down the river to Mobile 50 years ago; he has been in the export and bunker coal business ever since, and he knows all about it. It will only take him a few minutes to explain the situation there to the committee.

STATEMENT OF MR. A. C. DANNER, PRESIDENT MOBILE COAL CO., MOBILE, ALA.

Senator RANSDELL. Capt. Danner, will you please state your full name?

Mr. DANNER. My name is A. C. Danner. I am president of the Mobile Coal Co. We are in the coal business, and supply Government vessels and other vessels with coal. Our principal business is bunker coal.

There is in Alabama a very large amount of coal. It is not all good. But there is a large seam, known as the Black Creek seam, on which the Sipsey mine and the Empire mine, and a number of others are operating.

That is good coal. On that coal steamers have gone across the ocean and come back time and again, and the captains of those steamers have told me that there is nothing better in England; that the Welsh coal is no better; that the Pocahontas coal is no better. That coal takes them over there and back—and that is the kind that we want during war times.

Now, that coal is all just above navigation. The Government has built 17 locks and dams, and they lack just one more to get up to this high-grade coal. That is the situation as to the upper Warrior River.

Senator NELSON. You say they need one lock more. What would be the distance to get up there?

Mr. DANNER. I think it is 50 miles.

Senator NELSON. Fifty miles farther?

Mr. DANNER. Yes, sir. Now, the question was asked just now as to why those barges are not being operated. The principal company is operating them every day; we got a tow of four barges, 2,100 tons, a couple of days before I left Mobile.

Senator NELSON. Does that belong to your company?

Mr. DANNER. Yes, sir—not the barges, but the coal. We buy the coal; we pay the mining company that is running the barges for the coal, and they bring it down on their barges, and we take charge of it then.

Senator NELSON. The mining companies, then, own the barges and operate them?

Mr. DANNER. Yes, sir. Now, there have been three of those companies in operation. They have been operated by the Pratt Consolidated Co. and by the Tennessee Coal, Iron & Railroad Co. The Pratt Consolidated coal all went to New Orleans to furnish the Louisiana Sugar Refinery. That refinery shut down, and the Pratt company stopped its barges. The Tennessee company also, for some reason, discontinuing their New Orleans barges. Mr. De Bardeleben, of the Tennessee Coal Co., has 12 barges and 1 towboat, a very good boat. He runs up there as fast as he can and has four boats at each place; he comes down to Mobile with four boats, carrying in all 2,000 tons, and there are four empties waiting there for the tow, and in an hour his steamboats are on the way back with four empties, and when they get back to the mines there are four other barges there loaded, and he then takes them down the river, and he operates in that way right along.

My company buys that coal from him, except what goes to New Orleans. Sometimes half of it goes to New Orleans, and sometimes we get it all; we want all of it all the time, but can not get it.

Senator NELSON. Do the barges that come down the river go to New Orleans?

Mr. DANNER. These are wooden barges, which can not go to New Orleans. The coal is transferred at Mobile to the steel barges that come from New Orleans and meet the wooden barges at Mobile; and there we have one of these locomotive trains, and we unload the coal on one of those barges.

Senator NELSON. You have to unload the coal from the river barges and put it on the steel barges that go to New Orleans?

Mr. DANNER. Yes; and it goes across Mississippi Sound, Lake Borgne, and by Lake Pontchartrain. It is an expensive way of carrying it.

Senator VARDAMAN. Could not the steel barges that carry the coal down the river be used for carrying it on to New Orleans?

Mr. DANNER. Some of them could. But these barges that are in New Orleans are not suitable for that; they have no power in them and are not big enough; they are built for the Lake Borgne Canal.

Senator NELSON. Well, I suppose you could build bigger barges for the Sound and Lake Pontchartrain than you could use on the river?

Mr. DANNER. Yes, sir. The coal ought to be concentrated at Mobile; it ought to be unloaded there; and there ought to be a great depot there, and then New Orleans and other places could come there for their coal.

Senator RANSDELL. Is it not feasible to have the coal loaded at the mines and sent all the way to New Orleans by water?

Mr. DANNER. Yes, sir; but the Lake Borgne Canal has not as much water in it as the river.

The CHAIRMAN. What became of an enterprise that you had there some years ago concerning which a gentleman wrote to me several times who had built some self-propelling steel barges?

Mr. DANNER. Those barges are owned by a man in Boston who took the bonds; and the barges are now in New Orleans. They were too small; they did not have power enough; and the thing was a failure from a financial standpoint. They are still operated, and they carry coal across there now.

Senator BANKHEAD. Do they not go up the Warrior River also?

Mr. DANNER. Yes, sir; some of them are loaded there and go down the river.

Now, in regard to the question that was asked of Senator Bankhead, as to why the mine owners were not operating the barges more extensively, I will tell you that they have not the money; it is no small job. In order to do it properly it would require, at the lowest figure, $1,000,000. I have figured on that in two ways, and figuring one way I made the estimated cost $2,000,000. It would be necessary to provide a storage place and unloading cranes and to have enough barges and towboats. To handle the amount of coal that Senator Bankhead referred to just now would take at least $1,000,000 capital, and there is nobody in Alabama who has that to invest in the plan.

The mines that are in operation there are generally working up to their full capital. Many of them have bonds out, they having borrowed money, and it is a big job, this river end of the proposition, by itself. And there is nobody to take hold of it.

The CHAIRMAN. How do the freight rates compare on the barges with the railroad rates?

Mr. DANNER. They are charging $1.10, the same as the railroad rate; they are making it just the same as the railroad rate. It costs about 50 cents, when everything goes right.

Senator NELSON. From the mines to Mobile?

Mr. DANNER. Yes, sir. There was a steamboat captain the other day who was interviewed by the Mobile *Register*, and who said that he brought down a tow for 35 cents a ton; that he brought down 1,000 tons, and it cost him 35 cents a ton. But he said nothing about the interest on the investment and the wear and tear—and the steamboat that he was talking about was put on the ways soon after

that, and it cost several thousand dollars to overhaul it and repair it; and, of course, all those expenses have to be taken into consideration.

Senator VARDAMAN. Then you can not carry coal from the mines down the river cheaper than the railroads carry it to New Orleans?

Mr. DANNER. Yes; a large quantity you can. I think you can easily carry it for 50 cents a ton. I know that, in fact.

Senator VARDAMAN. And what is the railroad rate?

Mr. DANNER. $1.10.

Senator VARDAMAN. Then, by charging $1 a ton on the barges you could make the business very profitable?

Mr. DANNER. Well, there are a good many overhead charges of various kinds; and the fact that they are doing it in such a small way makes it more expensive. The Barnable Coal Co. have put into this business—this water-transportation part of it—about $100,000, and their equipment is not what it ought to be, by any means; it needs a great deal more money than that to do it right.

Senator RANSDELL. Have you not had a scarcity of coal in Mobile and also in New Orleans?

Mr. DANNER. A very great scarcity.

Senator BANKHEAD. Have you not had a very large number of orders to send coal over to Cuba which you could not fill?

Mr. DANNER. Yes, sir. We had an order the other day for 100,000 tons from some sugar interests. But I at once advised them that we could not furnish it at all.

Now, with regard to the matter of price that was mentioned a few moments ago: I said that the Government allowed the mines to charge $3.10, which, I believe, is correct. But very recently Dr. Garfield, the Fuel Administrator—it has been brought to his attention and he has acted on it—decided that the foreign vessels are taking too much coal out of this country; they are not leaving enough in this country. Coal in the United States, at Norfolk, for instance, was much cheaper than it was in England. And so he wanted to check this amount of coal that the foreign Governments were taking, and he wanted to make it less, and he authorized the mines in Alabama, and I think in West Virginia, also, to charge $1.35 more for all foreign bunker coal. The result has been that all the mines want to ship foreign bunker coal, and none of them want to ship anything else. And all the bills we are getting now and all the bills of lading are stamped "Foreign bunkers."

Well, there is a lot of business that is done that does not go to foreign countries. There are the United States Engineers, and the Lighthouse Service boats, and the various kinds of boats that the Government is using along the coast there—they are not foreign bunkers; and so we can not get any coal.

Senator VARDAMAN. What do you sell your coal for?

Mr. DANNER. We sell it all the way from $5 a ton, including the lighterage, handling, and trimming on the ship: about $5 or $5.50.

Senator VARDAMAN. What do you sell it for at the mines?

Mr. DANNER. They sell it there—well, we are paying for our coal now $3.65 in Mobile, on the barges.

Senator VARDAMAN. That additional price for foreign use has recently been made by the Fuel Administrator, has it not?

Mr. DANNER. Yes, sir; he has put that $1.35 on.

Senator VARDAMAN. Yes; that matter was discussed here in t committee several days ago.

Mr. DANNER. Of course, it is top of the mine coal, and it is right, I suppose.

The CHAIRMAN. There would be no difficulty about having a su cient quantity of coal available at the mines in case the transport tion was provided, would there?

Mr. DANNER. No, sir; it could be increased; there is a great de of coal there, but it is not being mined.

Senator VARDAMAN. If the Government should take over the barges, what amount of coal could be produced in the mines co tiguous to the river that could be carried in that way to the se board?

Mr. DANNER. Oh, it is simply a matter of labor and capital. I not know; but there is plenty of it there.

Senator VARDAMAN. I mean in those mines that are being operate

Senator BANKHEAD. As I have stated, two of those mines are no producing 2,500 tons a day.

Senator VARDAMAN. Well, 2,500 tons a day would be a very sma amount if the Government should go into the matter of providin an ample fleet of barges.

Senator BANKHEAD. Well, they could easily carry 5,000 a day.

Senator RANSDELL. Do you not claim to have enough coal in the fields of Alabama to last the whole world for hundreds of years?

Senator BANKHEAD. Yes.

Senator VARDAMAN. I do not want to know about the coal that is i the bowels of the earth, but how many mines are being operate and what would be the probable yield of coal that could be produce and carried by the proposed barges down the river?

Senator BANKHEAD. Well, if they could get sufficient barges the could produce enough coal there to carry 10,000 tons a day down Mobile.

Senator JONES. I understood Capt. Danner to say a few momen ago that the capital of the people operating the mines was workir to its full capacity now.

Mr. DANNER. I think so. I do not think they could go into t river-transportation business on the scale on which it should carried on. And I do not think anybody else will go into it if t Government does not do so.

Senator JONES. That is what I wanted to make clear: Do y think if more barges were put on the river there would be mo private capital put into the operation of the mines?

Mr. DANNER. No: I do not think there would.

Senator JONES. Then how would you increase the output of t mines?

Mr. DANNER. The people down there will take care of the mines somebody will furnish the barges to transport the coal.

Senator JONES. That is what I say: If you get additional bar facilities will there be capital invested in the mines so as to increa the output of coal?

Mr. DANNER. Oh, yes; I think so.

Senator BANKHEAD. They do not need any additional capital connection with the output of the mines; they are mining the co now, but they have not the transportation for it.

Senator JONES. Well, they must be transporting the coal now, because it is not being piled up there.

Mr. DANNER. Three weeks ago in Alabama there were 1,700 cars of coal loaded on the Frisco Railroad tracks that could not be moved for the want of locomotives, and the people there want this river transportation so that they can move that coal. The mines there are very often idle for the lack of cars to carry the coal; there would be no empty cars to put in; and the men then have to knock off work for a day or so before there would be any cars to put the coal on.

Senator RANSDELL. Capt. Danner, are not the people of New Orleans and other cities along the Gulf as much interested as the people of Mobile in this proposition?

Mr. DANNER. Yes, sir; they are very much interested. New Orleans is interested, Pensacola is interested, and Galveston is interested. But two-thirds of this coal that has gone down the river has gone to New Orleans.

The CHAIRMAN. The Government has some large requirements of coal at Pensacola, Fla., in connection with the aviation camp, the navy yard, and other governmental activities there?

Mr. DANNER. Yes, sir. I should like very much to impress upon the committee the importance of that lock that I have referred to in connection with getting the coal; it will back the water right up the Sipsey River; and there are several good mines there that can be used to great advantage.

Senator RANSDELL. Has there been an engineer's survey of that project?

Mr. DANNER. Yes, sir.

Senator RANSDELL. Has it been reported on favorably by the War Department?

Mr. DANNER. I think so.

Senator BANKHEAD. Yes; it has. This lock that he is referring to would be located at a point only 6 miles away from the improvements that have already been made on the river; the river has been improved to within 6 miles of the proposed lock. And the river is very flat above that for 40 or 50 miles.

Senator RANSDELL. Would that be an expensive lock to construct?

Senator BANKHEAD. No; it could be constructed very cheaply. I am now in communication with the Engineer Department of the Army about it, trying to get them to put up a wooden structure there.

Mr. DANNER. The owner of a coal mine near there was going to put that lock in, and he came to Washington to get permission to do so, and they would not give him the permission. They said that a private individual could not put in a lock and that he would not have the exclusive use of it; and there [illegible] that neighborhood that would have the right to use it. But [illegible] that lock in there and is willing to [illegible] to get it. He will furnish the necessary [illegible] under the proper conditions.

Senator SHERMAN. Are any of the [illegible]?

Mr. DANNER. Yes, sir; I think so.

Senator SHERMAN. What is the [illegible]?

Mr. DANNER. For the reason [illegible] Sugar Refinery [illegible] down.

Senator SHERMAN. Yes; I [illegible]

Mr. DANNER. They had a very large contract with the Pratt C solidated Co., and the Pratt Co. barges are all idle in New Orle now, and they are for sale.

Senator BANKHEAD. To summarize, Mr. Chairman, I would like say that this is what we want down there: We want the Shippi Board to take hold of this transportation situation and see that th barges and towboats are constructed. The Fuel Administration v handle the fuel end of the situation and the Director General Railroads will handle the railroad end of it and see that proper r road rates are made to connect the mines with this river; that has been thrashed out.

Senator JONES. Well, the Shipping Board has the money and t authority to act, has it not?

Senator BANKHEAD. Yes.

Senator JONES. Then, why should this committee do anythi about it?

Senator BANKHEAD. Well, I do not say that it should do so. B it occurred to me that if this committee would show sufficient inte est, the Shipping Board might be induced to hasten action som what. I understand they are now going to send a man down the to investigate the situation.

The CHAIRMAN. The Shipping Board might buy the barges th are now down there?

Senator BANKHEAD. Yes; and then it would not be a very lar undertaking to build whatever barges were necessary; a barge wou cost only $5,000.

Senator RANSDELL. And we are now proposing to appropriate f the Director General of Railroads $500,000,000.

Senator JONES. That is not the question. The Shipping Boa has the authority to act and the funds; and they should take t responsibility of doing it if it is to be done.

Senator NELSON. Let them take some of this Hog Island mon to do it with. [Laughter.]

Senator JONES. Yes.

Senator BANKHEAD. Well, the Government has already spent ma millions for the improvement of the upper Mississippi River.

Senator JONES. Yes; but let the Shipping Board take the respon bility. We have given them the authority and the money, and th should be the ones to act—the quicker, the better—if they think it desirable.

Mr. DANNER. It is an opportunity to greatly increase the sup of good coal.

The CHAIRMAN. We are very much obliged to you, Capt. Danner

Gentlemen, I have a communication from Mr. Piez, general m ager of the Emergency Fleet Corporation, giving an itemized st ment of the disbursements made to Mr. Theodore E. Ferris fr June, 1917, to January 28, 1918. In the absence of objection, letter of Mr. Piez and the accompanying statement will be inser in the record at this point:

(The letter and statement referred to are here printed in full follows:)

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, January 31, 1918.

Hon. DUNCAN U. FLETCHER,
United States Senate.

MY DEAR SENATOR: In compliance with request contained in your letter of January 18, I have had our auditor prepare an itemized statement of the disbursements made to Mr. Theo. Ferris and his force, by months, under agreement as set forth in his letter to Gen. Goethals of April 25, and Gen. Goethals's reply dated April 27, 1917. I trust this letter will give your committee the information which it desires.

Sincerely, yours,

CHARLES PIEZ,
Vice President and General Manager.

Analysis of disbursements to Theodore E. Ferris, June, 1917, to Jan. 28, 1918.

	Vouchers.		Check.	Amount.	Fixed fees.	Office staff salaries.
1917.						
June	96	Theo. E. Ferris	101	$6,353.44	$3,750	$1,410.79
Do	97	do	101	[1] 3,000.00	3,000	
July	313	do	483	5,354.92	2,500	1,753.92
August	619	do	1077	5,740.66	2,500	1,765.29
September	952	do	1981	6,320.60	2,500	2,294.70
October	2037	do	4016	6,960.17	2,500	1,959.29
November	2396	do	5100	3,264.30	2,500	135.63
December	3017	do	7072	3,379.22	2,500	156.18
1918.						
January	3681	do	9668	3,000.06	2,500	53.35
Do	3735	do	11445	2,737.78		1,962.90
Total				46,020.17	24,250	11,904.96

	Overhead, 30 per cent, office staff salaries.	Traveling expenses, including assistants.	Engineering drafting supplies.	Office expense.	Telephone and telegrams.	Public stenographers.	Testing.	Miscellaneous.
1917.								
June	$423.23	$163.30	$73.36		$27.29	[illegible]	$19.22	
July	526.15	129.71	59.50		38.51	348.[illegible]		
August	536.45	292.66	121.91		126.92	274.65		
September	679.41	234.75	135.93		146.53	230.27		
October	581.75	415.17	174.69		49.04	752.[illegible]	[illegible]	[illegible]
November	40.69	439.06	49.02	$42.51	54.39			
December	46.53	374.48	42.67	[illegible]	22.58		222.54	[illegible]
1918.								
January	16.00	159.33	30.73		46.58		239.67	2.24
Do	558.57	25.00	257.14		30.45	24.46		4.66
Total	3,409.46	2,266.49	924.29	42.51	556.02	2,239.54	852.54	[illegible]

[1] Services rendered in accordance with [illegible] preparing arrangement plans and [illegible] specifications of standard wooden cargo ships.

[2] Item of $92.66, miscellaneous. "To [illegible] and [illegible] expenses and [illegible] correspondence to Washington."

RECAPITULATION.

Fixed fees	$24,250.00
Office staff	11,904.96
Overhead	3,409.46
Traveling expense	2,266.49
Engineering and drafting expenses	924.29
Office expense	42.51
Telephone and telegrams	556.02
Public stenographer	2,239.54
Testing	852.54
Miscellaneous	[illegible]
Total	46,020.17

The CHAIRMAN (continuing). I have also a letter from William R. Fitzsimmons, Latham Park, Pa., addressed to the committee stating that the conditions at Hog Island ought to be investigated and also a letter from Mr. Eugene E. Tickle, Bristol, Pa., stating that there is great need for investigation and reform at the Hog Island plant and inclosing a communication in which he gives details of what he regards as defects of organization, etc., at that place.

I think those letters should go in the record at this place.

(The letters referred to are here printed in full, as follows:)

LATHAM PARK, PA., *January 30, 1918.*

COMMITTEE ON COMMERCE, UNITED STATES SENATE.

GENTLEMEN: Permit me to say I am very glad to read in my newspaper that your committee intend to thoroughly investigate shipbuilding plant at Hog Island. From what I hear from workmen employed at Hog Island it is a disgrace and one of the greatest steals of money to pay men who do nothing but loaf and draw pay that has ever been perpetrated in America. For example, an employee at Hog Island said good name, "Hogs of Hog Island," and he showed his pay envelope calling for $48.80 for 6 days. He, furthermore, said the island was the worst managed. No system, with thousands of loafers and unskilled men doing as they pleased. Pile driving was a hard job, so this loyal American walked around island hunting an easier job with more pay, and now he is a painter on inside work. Your committee should shut down the work on island until April 1 next and then have Government officers oversee the work. I write this letter for only one reason. I am tired of hearing the disgraceful roasting of employees of Hog Island and how easy they get their money, for they say contractors get 10 per cent upon our wages, so what do we or they care.

I am, respectfully, yours,

WM. R. FITZSIMMONS.

BRISTOL, PA., *January 31, 1918.*

SENATE COMMERCE COMMITTEE,
Washington, D. C.

GENTLEMEN: Inclosed find a copy of letter written to Mr. Goodenough and mailed to him on same date it was written.

He was not "good enough" or interested enough to reply. I presume the contents sounded or read to him like the author was a fool. "Perhaps he was right."

I am a nobody as far as reputation is concerned, but have made 20 years' study of laborers and their conditions in a way I will venture to say that but few men have.

I am holding a $21-a-week position now, when I could be working for $75 per week and not putting up with hardships I am. I make this explanation so you may understand why this letter is addressed to you.

I am not looking for notoriety. If I were I would get 40 or 50 sworn statements of conditions at Hog Island and go to some yellow journal or newspaper, and I know there would be plenty of notoriety. I would be sorry if anybody should do this, and nothing would make me be so little during the war. I am trying to do my bit and help where I can.

To the letter written to Mr. Goodenough you will find some notes attached. I hope these may be of some benefit to you and help you get ships built.

If you should be interested in this, if you will give or send written authority to use a stenographer of Merchants Shipbuilding Corporation two days, I will send you plans and ideas for getting cooperation at shipyards that would be worth millions to the Government, and will do so gratis. I could not run the Government or any large private business, am not an engineer, and it is hard for me to read a simple blue print; but I do know working people, their ideas, and how to get work out of them and keep them satisfied.

Thanking you, I am,

Yours, to command,

EUGENE E. TICKLE.

PHILADELPHIA, PA., *January 19, 1918.*

Mr. GOODENOUGH,
Manager American International Shipbuilding Corporation,
Philadelphia, Pa.

DEAR SIR: Would it interest you if I told you positively that I could save the Government hundreds of thousands of dollars in construction of shipyards at Hog Island? Besides, helping to get them built at least one month sooner than they will be finished at the present progress of the work. This sounds like a broad statement, but if you will visit Hog Island any time and spend 12 hours with me, then study my plan, you will be convinced. I will speak plain and say there is less efficiency at Hog Island than any place I have ever visited or made a note of.

If it is not a matter of saving money, it is a matter of saving from forty to seventy-five thousand hours of labor each and every day. Perhaps you may doubt this; nevertheless it is a positive fact which I can prove any day. I could remedy this at very little expense and with no executive authority whatever.

I will state some of the conditions at Hog Island I take for granted you know nothing of:

1. In case of fire at Hog Island there is only the fire department to depend on. There is no set rule for the employees in case of fire; neither is there a set signal that is known among the workers. Is the fire department adequate to handle any fire that may occur at Hog Island? Smoking is allowed; is not stopped in sleeping quarters. Neither are there any restrictions as to smoking in the lumberyards or about building fires in the open.

Fires are seldom extinguished when they are left in the open.

2. Men move from one department to another, sometimes in order to get their money, and in hundreds of cases they would have no explanation to offer for moving. They lose from one to two days in each move, which is seldom a benefit to them, and is a loss to the Government. They do not care if they are discharged by any foreman, as they have full knowledge of the fact that they can work in another department for the same money. In thousands of cases the foreman is afraid to discharge a man who will insult him or refuse to do his work. Most foremen have the explanation that they do not want it said they are unable to hold their men, and in some cases they have no authority whatever to discharge an employee when he does refuse to work.

3. Much complaint is being made about hiring men from other plants and shipyards. A little "bluff" would stop 90 per cent of this at practically no expense.

4. *Quick buying for emergencies.*—This is not at Hog Island. "Red tape" is in abundance when it comes to getting a little article that is needed; an illustration—there is an employee needing a small hand blowtorch. There is not one in the supply house. It makes no difference how badly this torch is needed, it will take at least a week under the present system to get the same, when it should be gotten in 24 hours. There are hundreds of cases of this kind every week.

5. Feeding conditions at Hog Island are an insult to you and to the workers. They are too slow and look very insanitary. I would like to go over these with you so you would fully understand how bad they are. It is hard to keep good workers with these conditions.

6. *Sleeping quarters.*—These are now getting full of vermin. This sounds bad, but it is the truth. Hundreds of quilts and mattresses will be burned if you do not get a system to keep them sanitary. To keep them sanitary is very simple, and would mean but the cost of one small house, fitted with a few steam radiators and steam pipes, and one man to take care of the same. No other expense but what you already have.

7. Half the men on the island that are supposed to be at work at 7 a. m. are seldom on the job before 8. They check in at their division office before 7, but get their breakfast after they check, and only try to get to work before their checker arrives on their job.

8. I have made a careful study of railroad conditions. Take engine hous just below administration building. This is the condition there: On the nigh shift. I "worked" (put the soft pedal on when you mention work at this engine house) four boiler makers, three boiler makers' helpers; they could not stop a leak in a flue. There are positively no tools here for these men to use. To put a new flue in the engine would be impossible, as they would be unabl

to procure one—anything to expand a flue with—and I doubt if they could ; a chisel to cut an old flue out. In plain words this is robbing the Governm of the labor these men could do in places where ships and boilers are being ma now. A handy man could do all the work these seven men do, excepting t amount of sleeping. Machinists on the night shift—about 8 and about 5 he ers. One man could do all that these 13 men do. Some night one engine m come in with a broken step or a hot box. Seldom more than two engines co in for very minor repairs. On these men's daily reports they show:

	Hou
On engine No. ——	
On engine No. ——	
On engine No. ——	
On engine No. ——	
Total	1

The fact of the matter is that seldom they work 1 hour out of the 12; th should be let go to where they would be of some benefit.

The laborers.—About 15 and a steam shovel to coal 5 or 6 engines. A from information I gathered the day shift that this house has is very litt better than the night shift. I have been informed that the boiler makers c the day shift are getting in 24 hours per day by working in this house in da time and washing out engines at night at some other location. There are tw blacksmiths on the night shift and one blacksmith's helper. Sometimes th heat one piece of iron, but most nights nothing but build a fire and go to slee All work done in this shop by a blacksmith could be easily done in blacksmit shop two blocks away. Most all men in the shop come to work from one-ha to one hour late; leave one-half to one hour early; supposed to work 12 hour They take no time off for midnight lunch. You will find almost every man i this house asleep after midnight until 5.30 a. m.

There are many more things I could tell you, and if you are interested an wish more information you may address me at Hog Island.

Yours, very respectfully, ——— ——.

NUISANCES.

Men urinate from barracks windows; often stool anywhere on grounds.

If more restrictions are not made, when spring comes there will be so muc sickness at Island no progress will be made at all.

Engines run dark—that is, they often have no headlight or markers. Th and the fact that many brakemen and switchmen have farm lanterns wi kerosene oil, which smokes globes and goes out very easy, does not make f safety.

I saw, one Sunday, an average of 150 to 175 wagons and auto trucks block at crossing for over four hours, while train was shifting cinders, etc.

There are many things I could write, but it takes too much of your time, a the above will give you a good idea of the conditions.

I will be pleased to answer any questions you wish to ask.

Anything you find here you can verify without any doubt in the world.

This is my third day here at Bristol, working for Merchant Shipbuildi Corporation, and from what I see here and have heard so far, there is mu more efficiency and everything runs more smooth with the workers.

Prices for meals are about 40 per cent more than they should be, by pri in Philadelphia and New York, and police wages are only 50 per cent wh they are in Hog Island, which causes a little dissatisfaction, but the work here have confidence of being able to produce ships, while many in Hog Isla have their doubts. Begging pardon for condition this letter and information in, I thank you.

E. E. TICKLA

SAVING 40,000 HOURS OF LABOR.

Am satisfied half-contented man will do twice the amount of work as a poo fed, unsatisfied, discontented, unwilling worker, especially when he is worki for his Government and can feel that the Government is being robbed a knows positively he is being robbed out of half of his meals three times a d Inefficiency breeds discontent, as also does idleness. A busy worker when he contented on his job is a happy man. So when you figure a condition wh

ome men even complain that they have nothing to do, as at Hog Island, believe me, things are bad, and it is felt by every man on the job. It takes too much xplanation to show this on paper; but if you don't think 40,000 hours a day ould be saved in labor with 16,000 to 20,000 men working with bad feelings gainst conditions, with Hog Island inefficiency, and men going to work 30 to 45 minutes late and quitting that much too early and taking on an average of 1 hour and 15 minutes noon, when they should take only 30 minutes, I am sure some one is wrong.

There are many things that it would take too much time to write, which I wish to tell Mr. Goodenough, such as—

1. Twenty to thirty wagons standing at a time waiting for to be loaded, where it takes 10 minutes to load a wagon. This was an everyday occurrence.

2. Dinky engines running with dinky trains 20 to 25 miles an hour on unballasted track.

3. Two janitors day, two janitors night, and one clerk for sleeping quarters of 100 men, besides a floating gang of about 20; 30 or 40 general office clerks for barracks, many foremen and inspectors. This is a waste of men and money—positively a farce as far as business is concerned.

4. Where most moving was to be made by pile drivers was where the heaviest pile drivers were—the ones it was the hardest to move and the ones it took more time to move. I counted piles on seven machines for five days. That is, the number of piles that machines put down. Then figure it cost over $40 to drive each pile for labor alone. Some system. If you doubt this, see the books.

Attached article clipped from Hog Island News, published by American International Shipbuilding Corporation January 1, 1918:

[Hog Island News, Jan. 1.]

"HOG ISLAND MESS HALLS—INSIDE INFORMATION

"Napoleon said that an army travels on its stomach. The same can be said of the large industrial army now at Hog Island. The American International Shipbuilding Corporation knows that to work properly a man must be properly fed. It has erected two mess halls in the yard with a seating capacity of 3,000 each. Here only the best of meals are served. The mess halls are similar to those at the Army cantonments.

"It is a rare sight to watch the thousands of hungry workmen marching into the mess halls at mealtime. A sample menu of the food served is as follows: Two slices of roast beef, whole boiled potatoes, lima beans, turnips, bread, butter, crackers, pie, and real coffee. The bread, pies, and cakes are baked at the mess-hall bakery.

"Each hall uses daily 2 whole steers, 25 bushels of potatoes, 3 bushels of onions, 3 bushels of carrots, 200 gallons of coffee, 400 pies, 150 pounds of the best butter, 65 pans of fancy cakes, and 800 loaves of bread. Patent steamers cook 4 bushels of potatoes in 25 minutes.

"The food and water supply is guarded 24 hours a day. Daily inspection and frequent chemical and bacteriological analyses are but a few of the steps taken to insure purity. Rigid inspection is made of the houses from whom supplies are purchased. The manner of handling, shipping, storing, and preparing the food is carefully watched, and a daily report of the food served in the mess halls is submitted to the surgeon of the health department for observation as to nutritive value and potential energy."

I ate 45 meals at Hog Island. At no time did I ever receive two vegetables at a meal; at no time did I ever see a piece of pie served a worker; at no time did I ever see a piece of cake served a worker; at no time did I ever know a real cup of coffee served.

If the surgeon of health department would recommend such meals to workers as are served there he should have or be compelled to eat in the halls with the workers and eat the same meals for 30 days.

A sample of the average midnight meal, the one most often served: Two frankfurters boiled until they are black; about five ounces of stuff called potato salad, no oil, but made of some vinegar, raw eggs, or egg coloring, etc., only made in a way to spoil good potatoes; five ounces of boiled rice, no milk or sugar for same; one cup of coffee, so called, tastes like Imperial Valley, Cal., irrigation water. I believe from the taste, coffee and tea are boil made in same boiler (no sugar, ever since I was there, for coffee or any other food or drink); 3 slices of bread, sometimes moldy, thrown on a greasy service tray.

with greasy water on bottom of tray; one small saucer of pudding, standi dish, looks like rubber and eats like chewing gum, a teaspoonful of sau thrown on or at same.

I can get proof, with a hundred sworn statements, if you should care, th I can purchase a better meal, a more wholesome meal, and a cleaner meal, al a more abundant meal in Philadelphia for 15 cents. Hog Island price, cents.

I forgot to make mention of one piece of butter at each meal.

I mean for 15 cents I can get a better meal in Philadelphia than best I ev received in Hog Island.

Meals at Hog Island are all served in agate dishes, looking half washed, a greasy tray half wiped, half washed; silver is the same.

I have raked dirt or swill from between prongs of fork.

BRISTOL, PA., *January 31, 1918.*

Last night I got positive information that after 12 p. m. there was no guar on duty at gates of shipyards here at Bristol—that is, at most entranc They were in large majority asleep after that time. If an alien enemy shou have wished to enter, no one would have been there to stop him. Compari wages here of guards to those of other occupations, you will find why or men on the average who are too lazy to do work and are looking for somethi easy, hold these positions.

(Thereupon, at 5.10 o'clock p. m., the committee adjourned to me at 2 o'clock p. m., Monday, February 4, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

MONDAY, FEBRUARY 4, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., Hon. Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Nelson, Jones, Harding, and H. Johnson.

Senator NELSON. Mr. Chairman, I have Mr. Tomlinson, a shipbuilder of Duluth, Minn., here; and I should like to have him make a statement on the matter of barges for the Erie Canal.

The CHAIRMAN. The committee will be very glad to hear Mr. Tomlinson.

STATEMENT OF MR. G. A. TOMLINSON, OF DULUTH, MINN.

Senator NELSON. Will you state for the record your full name, Mr. Tomlinson?

Mr. TOMLINSON. My name is G. A. Tomlinson.

Senator NELSON. Where do you live, Mr. Tomlinson?

Mr. TOMLINSON. Duluth, Minn.

Senator NELSON. What is your business?

Mr. TOMLINSON. I am engaged in lake transportation.

Senator NELSON. Are you connected with shipbuilding [illegible]?

Mr. TOMLINSON. Yes, sir.

Senator NELSON. At Duluth?

Mr. TOMLINSON. At Duluth; I am on the [illegible] of the American Shipbuilding Co.

Senator NELSON. Is their plant at Duluth?

Mr. TOMLINSON. They have them all over the Lakes; they have seven plants. I am also president of the Superior Shipbuilding Co., at Superior, Wis., just across from Duluth.

Senator NELSON. Are you building any ships for the Government for the Emergency Fleet Corporation?

Mr. TOMLINSON. The American Shipbuilding Co. [illegible] ships for them; and my yard is building [illegible] of those ships.

Senator NELSON. You are connected with the American Shipbuilding Co.; and that has how many yards on the Great Lakes?

Mr. TOMLINSON. Seven.

Senator NELSON. And then you are the president of the Shipbuilding Co. at Superior, Wis.?

Mr. TOMLINSON. Yes, sir.

Senator NELSON. And how many ships is that company building?

Mr. TOMLINSON. Eight.

Senator NELSON. And how many are the other yards building?

Mr. TOMLINSON. They are building 53 for the Government—that is, the American Shipbuilding Co. are.

Senator NELSON. They are building 53 for the Fleet Corporation?

Mr. TOMLINSON. Yes, sir.

The CHAIRMAN. At Cleveland, Buffalo, Loraine, Ohio; Detroit, Milwaukee, Chicago, and Superior.

Senator RANSDELL. What is your connection with that company?

Mr. TOMLINSON. The American?

Senator RANSDELL. Yes.

Mr. TOMLINSON. I am one of the executive committee.

Senator NELSON. And you are president of the Superior Co.?

Mr. TOMLINSON. Yes, sir; that is one of the subsidiary companies of the American.

The CHAIRMAN. What kind of ships are those you are building for the Government?

Mr. TOMLINSON. Three thousand three hundred to 3,500 tons.

The CHAIRMAN. Are they of steel?

Mr. TOMLINSON. Yes, sir.

The CHAIRMAN. How will you get them out of the Lakes?

Mr. TOMLINSON. Through the Welland Canal and the St. Lawrence River.

The CHAIRMAN. Will they have to be cut in two?

Mr. TOMLINSON. No, sir; they are just full canal size.

The CHAIRMAN. They did bring some through that way to the seaboard that had to be cut in two.

Mr. TOMLINSON. Yes, sir; but they were ships that had already been built.

Senator NELSON. And all that they are building now are of such a size that they will go through the canal?

Mr. TOMLINSON. Yes, sir; they will go through the canal.

Senator RANSDELL. What did you say the tonnage was?

Mr. TOMLINSON. From 3,300 to 3,500.

The CHAIRMAN. Deadweight capacity?

Mr. TOMLINSON. Deadweight capacity.

Senator RANSDELL. Of course, they would go through the canal entirely unloaded?

Mr. TOMLINSON. Yes, sir.

The CHAIRMAN. Will they go through under their own steam? Will they be able to pass right through?

Mr. TOMLINSON. Yes, sir.

Senator NELSON. They are to be ocean transports, are they not?

Mr. TOMLINSON. Yes, sir; they are to be cargo carriers. I understand that about 75 are under construction for the Government on the Lakes. I do not know that authoritatively; but the other yards—known as the independent yards, have a very large program of building also.

Senator NELSON. They are building for the Government, too.

Mr. TOMLINSON. Yes, sir.

Senator NELSON. What type of ships are they?

or NELSON. You were building some for the Norwegians be-
requisitioning of ships?
OMLINSON. Yes, sir.
or NELSON. And they are all now requisitioned?
OMLINSON. They are now requisitioned; yes, sir.
or NELSON. You are familiar with the barge canal of New
re you not?
OMLINSON. Yes, sir.
or RANSDELL. Before you enter into that subject I would like
ou what are the operations of that company besides the ship-
g?
OMLINSON. We have a fleet of 26 steamers on the lake trade.
or RANSDELL. What do you haul with that fleet?
OMLINSON. Iron ore and coal.
or RANSDELL. Are you engaged heavily in the movement of

OMLINSON. One of our activities is the grain charter from
, Minn., and Fort William, Canada.
or Ransdell. Do you handle much grain?
OMLINSON. Well, my charter office handles 85 per cent of the
t of the American port of Duluth and about 35 per cent of
adian grain.
or RANSDELL. That is a very large percentage, then, of the
hat is moved on the Great Lakes, which is handled by your
office?
OMLINSON. That is out of Lake Superior. Of course, there is
arge amount from Chicago.
or RANSDELL. Then you are very familiar with the grain

OMLINSON. I think I am.

Mr. TOMLINSON. Yes, sir; in the winter

The CHAIRMAN. You are not using them at all?

Mr. TOMLINSON. No, sir.

Senator NELSON. Navigation closes about the 10th of December generally, does it not?

Mr. TOMLINSON. Yes, sir.

Senator NELSON. And opens when?

Mr. TOMLINSON. Theoretically, the 15th of April.

Senator NELSON. But it is in fact generally around the 1st of May, I suppose?

Mr. TOMLINSON. It depends on the ice conditions.

Senator NELSON. You said a minute ago that you were familiar with the Barge Canal. Now, I understood from what you stated to me at my office that your company is ready to build a lot of barges for that canal. Will you tell the committee about that now, please?

Mr. TOMLINSON. I want to say to the committee, first, that I am here at Senator Ransdell's request, he having heard that I had been in Washington last week, principally in connection with another matter.

I am not seeking anything from the Government. My associates in my 26 ships thought there was a splendid opportunity to equip the Erie Barge Canal in part with steel barges. To that end I have already $3,000,000 subscribed to go ahead with that work.

We have consulted with the steel company, the Lackawanna Steel Co., in Buffalo, and made arrangements with them to fabricate material for those barges. We had secured land to assemble them in Buffalo, and were ready to go ahead after the Government had assured us, first, that they would not commandeer the vessels, and second, that they would not engage in a construction plan of their own and thus be in competition with us.

I was here last week in connection with some other matters; and Secretary McAdoo requested me to call and see him the following day, which I did; and this matter was presented to him at that time by one of the officers of the War Department; and I gained the impression from what Secretary McAdoo said that it was quite likely that the Government would enter into the barge-construction plan on all of the inland waters. Of course, if the Government pursues that policy, we drop out.

Senator NELSON. But if the Government does not pursue that policy you stand ready to go ahead—or your company does?

Mr. TOMLINSON. Yes, sir.

Senator NELSON. And you can construct these 100 barges?

Mr. TOMLINSON. We can start to build 100 barges; we can not get them all out in one year.

Senator NELSON. How many could you get ready for the next crop movement?

Mr. TOMLINSON. I think we could get probably 30 or 40 of them.

The CHAIRMAN. What sized vessels?

Mr. TOMLINSON. About 650 tons. It is a very simple matter to build those barges.

Senator NELSON. That is the size that Mr. Williams, the State engineer of New York, said was the proper size.

The CHAIRMAN. What draft will those vessels be?

Mr. TOMLINSON. The State of New York will only permit a draft f 9½ feet, at first; ultimately, 10 feet. I am speaking of boats having 9½ feet draft now.

The CHAIRMAN. Those boats will have to be towed, will they not; hey are not self-propelling?

Mr. TOMLINSON. Both plans have been considered. We propose o have a steel steam tow, which will carry three barges.

Senator RANSDELL. How many tons will that tow and the three barges carry?

Mr. TOMLINSON. Two thousand five hundred or 2,600 tons.

The CHAIRMAN. Do you mean, then, that you are prepared to go ahead and build these barges for your own account?

Mr. TOMLINSON. Yes, sir: for our own account.

The CHAIRMAN. And with your own money?

Mr. TOMLINSON. Yes, sir: with our own money.

The CHAIRMAN. And you are willing to do that—and ready to do it—so that the information that this committee has heretofore had, given by the State engineer of New York, among others, to the effect that private capital could not be induced to go into that proposition is erroneous?

Mr. TOMLINSON. Well, that is our situation exactly, Mr. Chairman. This is not a promotion scheme.

Senator NELSON. You do not ask any bonus or any help of any kind, from the Government, do you?

Mr. TOMLINSON. No, sir.

Senator NELSON. Your company has $3,000,000 subscribed, and you have made arrangements with a steel company for the steel?

Mr. TOMLINSON. Yes, sir. We have made arrangements with the Lackawanna Steel Co., with Mr. Clarke, chairman of the Lackawanna Steel Co.: that is, the Government had agreed to release steel for us to purchase, for the construction of these barges.

Senator RANSDELL. Would you contemplate moving a very large quantity of the grain from Buffalo to the seaboard that you are now moving from the western end of Lake Superior to Buffalo?

Mr. TOMLINSON. Naturally that would be the principal commodity that we would carry.

The CHAIRMAN. Do I understand you [illegible] insist that you must have a monopoly of [illegible] fore you can go into it?

Mr. TOMLINSON. Well, 100 barges [illegible] Chairman.

The CHAIRMAN. I know: but [illegible] Government undertook to [illegible] that you would "drop out"?

Mr. TOMLINSON. Well, as I [illegible] am a western man, and I [illegible] to pay Government taxes [illegible] tion with me in my own [illegible] money for carrying [illegible] my own money to the [illegible] Government enter into [illegible] not know but what the [illegible] own individual effort [illegible] I do say that if the [illegible]

for these inland waterways, and especially the Erie Canal barges, I am not going into that business.

The CHAIRMAN. That is what I was trying to get at.

Mr. TOMLINSON. Well, you spoke about a "monopoly." It would take 600 or 800 barges to equip that canal.

The CHAIRMAN. I did not mean to use the word "monopoly" in any offensive sense; but from your first statement I understood that you would not undertake this if the Government proposed to build barges?

Mr. TOMLINSON. Yes, sir; that is correct.

The CHAIRMAN. And I wanted to find out whether you intended to limit that condition to this particular canal, or this particular enterprise, so that if the Government intended to build barges, for instance, for the Mississippi River or the Black Warrior River, that would not affect your plan?

Mr. TOMLINSON. I am simply a Great Lakes' man——

The CHAIRMAN (continuing). You do not mean to say, then that if the Government should go into the building of barges for use anywhere else, you would absolutely refuse to build barges?

Mr. TOMLINSON. No, sir; I wish to be understood as making reference only to the Erie Canal in that matter.

Senator NELSON. That is limited to the Erie Canal?

Mr. TOMLINSON. Yes, sir.

The CHAIRMAN. That is the information I wanted to bring out.

Senator RANSDELL. About how many tons of freight per annum would you contemplate carrying in your barges under your present plan? How many could you carry normally?

Mr. TOMLINSON. Off hand, I should say, perhaps, 2,000,000 tons. That is not a careful statement, however.

Senator RANSDELL. About 2,000,000 tons. And about how many tons normally would you consider a fair capacity of the Barge Canal?

Mr. TOMLINSON. Gen. Witherspoon, superintendent of public works of the State of New York, estimates the capacity of the canal as from 10,000,000 to 12,000,000 tons a year.

Senator RANSDELL. So that you would carry something like 20 per cent of that?

Mr. TOMLINSON. Please understand that I am speaking of that part of the canal which is between Albany and Buffalo.

Senator RANSDELL. Yes; the Erie Canal.

Mr. TOMLINSON. And there are some branches besides that.

The CHAIRMAN. Would it be your purpose to operate the barges or to sell them?

Mr. TOMLINSON. To operate them.

Senator RANSDELL. Just as you operate your ships on the Great Lakes?

Mr. TOMLINSON. Yes, sir.

Senator NELSON. Would you operate them in connection with the Lake boats?

Mr. TOMLINSON. I would operate them in connection with any Lake boats, not necessarily my own.

Senator NELSON. With the lake boats in general?

Mr. TOMLINSON. Yes, sir.

Senator NELSON. Carrying grain from the Great Lakes down to the seaboard?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. You would not depend on the railroads to get freight connection for your Erie Canal barges?

Mr. TOMLINSON. There were 177,000,000 bushels of grain that came to Buffalo last year and were delivered in the elevators there. That is over 5,000,000 tons.

The CHAIRMAN. Can you tell the committee how the freight rates on the line you suggest, carried by barges on the canal, would compare with the railroad freight rate from Buffalo to New York?

Mr. TOMLINSON. The average rail rate between Buffalo and New York is 6 miles per ton-mile. The cost of operating a barge under present conditions, I understand—I do not know this as a fact—but it is estimated by the officials of the State of New York at 2 mills per ton-mile.

Senator RANSDELL. Under the present conditions?

Mr. TOMLINSON. Under the present conditions.

Senator RANSDELL. With those small barges?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. With the 240-ton barges that they now use?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. It would be much cheaper with the large barges of 650 tons, would it not?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. So that that would make a very material saving in the freight charge, would it not?

Mr. TOMLINSON. Yes, sir. I understand that the average canal rate now is 4.8 mills.

Senator NELSON. You do not mean, of course, that you would want to have the exclusive right to build barges and operate them on the canal? You have no objection to private enterprise competing with you; it is only that you do not want to compete with the Government; is that correct?

Mr. TOMLINSON. Yes, sir; I am not afraid of the other fellow.

Senator NELSON. No; you are willing to stand your own against any other private interest, and will welcome the opportunity?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. As a matter of fact, you expect other companies to go into this proposition, do you not?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. If you lead the way, you expect other people to follow, do you not?

Mr. TOMLINSON. I think so. I should expect that ultimately they would put 15,000,000 tons capacity on there.

Senator NELSON. Do you think they would soon have barges enough constructed for the canal if the Government does not enter the field?

Mr. TOMLINSON. I do not know. I was surprised to hear that State Engineer Williams, of New York, was not very sanguine on the subject. I do not speak except for myself. I live a long way from the Erie Barge Canal, but we are willing to take the chance.

Senator NELSON. And you are ready to build 100 barges?

Mr. TOMLINSON. Yes, sir.

Senator NELSON. And the capacity of the canal would be about 400 barges, you say?

Mr. TOMLINSON. That would be rather a low estimate of the number, because there is more or less delay in the handling of freight; the more barges you have on the canal, naturally the more congestion there will be.

Senator NELSON. Yes.

Senator RANSDELL. If I understand you correctly, Mr. Tomlinson, your company is practically organized, and the money already subscribed to the extent of $3,000,000?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. And you are ready to begin building the boats at once?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. And all you want to be assured of is that when you build the boats and start the enterprise the Government will not itself enter into competition with you?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. As the Government can afford to operate at a loss, and you can not?

Mr. TOMLINSON. That is the idea, sir.

Senator NELSON. And the Government can afford to build at a loss, also?

Senator RANSDELL. And if the Government does not go in, and you are allowed to go in, you will put those boats on as promptly as possible, and will begin to operate 30 or 40 this year?

Mr. TOMLINSON. Yes, sir.

Senator RANSDELL. And, in all human probability, there will be a number of other companies operating on the Erie Canal; is that correct?

Mr. TOMLINSON. That is right, sir.

Senator RANSDELL. I did not want to state your position incorrectly. That is a very encouraging outlook, Mr. Tomlinson. It will give us some boats on one waterway, anyhow.

Senator JONES. It is not very encouraging, when considered in connection with the statement that Secretary McAdoo indicates that the Government will go into the business.

Mr. TOMLINSON. We will have to wait to see what the Government is going to do.

Senator RANSDELL. Well, we will, of course, assume that the Government will not do anything which can be done better by private interests.

Senator JONES. That is a very violent assumption at present..

Senator RANSDELL. Well, that is my assumption, anyhow.

The CHAIRMAN. I should very much prefer depending on Mr. Tomlinson's building barges for use on that canal than to have the Government have to do it.

Senator RANSDELL. So should I.

The CHAIRMAN. That would be a long step in the right direction.

Mr. TOMLINSON. That is all I have to say, Mr. Chairman. We are not asking anything; but Senator Ransdell asked me to come before the committee and explain our position in the matter.

Senator RANSDELL. I would like to state my reasons for asking Mr. Tomlinson to come before the committee:

As I became acquainted with him and we talked this matter over, it struck me as being such an interesting thing, and one that affected the public welfare so much, that I very gladly took him to Senator Nelson's office; and Senator Nelson, after we had discussed the matter, said, "By all means, let him come before the committee and give them a chance to hear him."

It is very encouraging to know that he is ready to go ahead on that proposition.

Senator NELSON. It is very refreshing to hear anybody who is willing to do anything for the Government without a price.

Mr. TOMLINSON. We are not willing to do anything for the Government, except in this respect, that we would like to go on and conduct this business.

Senator NELSON. Your company expects to operate those boats also when it builds them?

Mr. TOMLINSON. Yes, sir. This company is composed of a number of grain merchants and other people who will have freight to carry, and we can keep 100 of those boats going carrying the grain eastbound.

Senator RANSDELL. Of course, you expect to make a reasonable profit on your enterprise?

Mr. TOMLINSON. I expect to make all I can.

Senator RANSDELL. That is right.

Mr. TOMLINSON. And I expect you gentlemen to see that I get part of it.

The CHAIRMAN. We are very much obliged to you, Mr. Tomlinson, for your statement.

Before Mr. Cotton begins his statement, there are several papers that I think should be introduced in the record.

I have received a communication from Mr. Piez, vice president and general manager of the Fleet Corporation, with reference to a list of requisitioned vessels being built at the Sun shipbuilding plant at Chester, Pa.; this gives the names of the former owners, the deadweight tonnage and the original contract price. That information was called for by the committee several days ago, and the letter and its inclosure will be inserted in the record at this point.

(The letter and list referred to are here printed in full, as follows:)

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, January 30, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman Committee on Commerce, United States Senate.

MY DEAR SENATOR: In response to the request for information delivered yesterday to Mr. C. S. Stern, of the legal department, there is inclosed herewith a list of requisitioned vessels at the Sun Shipbuilding Co., which gives the names of the former owners, the deadweight tonnage, and the original contract price.

No adjustment of compensation to the Sun Shipbuilding Co. for the completion of these vessels has yet been reached.

Hull No. 1 on this list has been inspected by the Emergency Fleet Corporation and reconveyed to the Sun Oil Co., under agreements specifying:

(1) That the Shipping Board transfers all title to the company subject to terms of the requisition charter.

(2) That the Emergency Fleet Corporation agrees to reimburse the shipbuilder for all sums due for completing the ship.

(3) The company indemnifies the Emergency Fleet Corporation for all expenditures on account of said completion.

(4) The company releases the United States Shipping Board and the E gency Fleet Corporation for all liability arising out of the requisitioning c

(5) That the company waves any right against shipbuilder for delivery i the contract.

(6) The company warrants that it is sole owner of the contract.

(7) The company agrees not to transfer the ship without the consent c Shipping Board.

(8) The Shipping Board requisitions the possession of the vessel.

(9) The company agrees to accept the requisition charter rate as just pensation under this requisition.

No other settlements have been made with former owners, except wit Cunard Co. for hulls Nos. 3 and 4 as part of the general settlement with company. This was on the basis of their actual expenditures, plus 4½ pe interest, plus actual cost of superintendence.

The corporation has advanced $2,000,000 to the Sun Shipbuilding Co. fc account of the construction on all hulls. None of this has been appli hull No. 1.

Very truly, yours,

CHARLES PIEZ,
Vice President and General Mana

List of requisitioned vessels by shipyards.

Yard and hull No.	Former owner.	Dead-weight tonnage.	Contract price.	Vessels on cost plus basis, at estimated cost.	Type.	Date of completion.	D w to re by
Sun Shipbuilding Co., Chester, Pa.:							
1	Sun (A)	10,300	$1,100,000		Tanker	Dec. 29, 1917[1]	
2	do	10,300	1,100,000		do	Mar. 15, 1918	
3	Cunard (B)	10,000	1,550,000		Cargo	Feb. 1, 1918	
4	do	10,000	1,550,000		do	Mar. 15, 1918	
5	Luckenbach (A) S. S. Co.	10,000	1,390,000		do	June —, 1918	
6	do	10,000	1,390,000		do	July —, 1918	
7	Shawmut (A).	10,000	1,250,000		do	June —, 1918	
8	do	10,000	1,250,000		do	July —, 1918	
9	Luckenbach (A) S. S. Co.	10,000	1,400,000		do	Oct. —, 1918	
10	do	10,000	1,400,000		do	Feb. —, 1919	
13	Standard Oil (A).	10,150	1,850,000		Tanker	Feb. —, 1919	
14	do	10,150	1,850,000		do	May —, 1919	
17	Sun (A)	10,000	(2)	$1,412,700	do	July —, 1919	
18	do	10,000	(2)	1,412,700	do	Sept. —, 1919	
19	do	10,100	(2)	1,426,827	do	Dec. —, 1919	
20	do	10,100	(2)	1,426,827	do	Dec. —, 1919	
Total		161,100	17,080,000 5,679,054	5,679,054			
Aggregate of contract and estimated cost			22,759,054				

[1] Accepted and reconveyed. [2] Cost plus.

The CHAIRMAN. I have also a letter from Admiral Bowles, ger of division of steel-ship construction of the Emergency Corporation, dated February 1, with regard to the district of the corporation on the Pacific coast, Capt. John F. Blain, s that he is one of the most efficient and responsible of the distri cers. I think that letter ought to go into the record.

(The letter referred to is here printed in full, as follows:)

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, February 1, 1918.

Hon. DUNCAN U. FLETCHER,
Senate Committee on Commerce
United States Senate.

MY DEAR SENATOR FLETCHER: I have noticed in the record of the hearings of the Senate Committee on Commerce, a letter from Mr. A. R. Smith, in which he describes certain shipyards in the State of Washington, from what purports to be the attitude of a disinterested observer.

I regret to find that he takes occasion to insert in his letter serious reflections upon the district officer of the Emergency Fleet Corporation, Capt. John F. Blain. It does not seem wise to permit such statements to remain unchallenged, and I trust it will be sufficient for me to say that Capt. Blain is regarded as one of the most efficient and responsible of the district officers of the Fleet Corporation. He has a large amount of tonnage under his supervision and carries on his work in a manner which is highly satisfactory.

I believe he does have the reputation of being at times arbitrary, and, suffering from the same criticism myself, I am disposed to regard that as meritorious.

Very truly, yours,

F. T. BOWLES,
Managing Division of Steel-Ship Construction.

The CHAIRMAN (continuing). I have also received a communication from Mr. Piez, general manager, inclosing a statement of the compensation paid all employees of the American International Shipbuilding plant receiving a salary of $200 a month or over, and a comparison with the salaries received by such employees before entering the employ of that company. That will be inserted in the record at this point.

(The letter and statement referred to are here printed in full, as follows:)

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, February 2, 1918.

Hon. DUNCAN U. FLETCHER,
Senate Committee on Commerce,
United States Senate.

MY DEAR SENATOR: In accordance with your request, I inclose herewith a statement showing the names of all employees of the American International Shipbuilding Corporation who are receiving a salary of $200 per month and over. Their present salary and the salary they received for their services just prior to entering the employ of the American International Shipbuilding Corporation is also shown.

This list agrees with that shown on page 245, part 1, of the hearings before the Committee on Commerce, United States Senate, as regards the present salaries, and with the list submitted with my letter of January 29 to you, showing the salaries previously received.

Sincerely yours,

CHARLES PIEZ,
Vice President and General Manager.

American International Shipbuilding Corporation.

[*See book.]

Name.	Position.	Rate per month at present.	Rate per month previous to entering employ.	
Engineering department (W. O. No. 100):				
Bluhm, H. W..	Designing engineer.....	$250.00	$200.00	
Bowerman, E. R.	Assistant structural engineer	250.00	225.00	
Boyajohn, H. M	Structural engineer.....	400.00	500.00	
Converse, W. F.	Assistant mechanical engineer.	350.00	(*)	
Dale, O. G.....	Assistant chief engineer.....	666.67	.....	Earnings from his b cidedly more th salary.
Davenport, R..	Assistant mechanical engineer.	333.34	(*)	
Emerson, G. D.	Assistant civil engineer.....	350.00	300.00	
Fuller, Wm. A.	Sanitary engineer.....	500.00	.....	50 per cent of all fe penses, as member 9 years.
Grumwell, P. C.	Designing engineer.....	234.00	233.33	
Haggard, H. H.	Assistant utility engineer...	250.00	(1)	
Hayne, Dan C..	Assistant sanitary engineer.	300.00	250.00	
Hirsch, J. G....	Chief draftsman.....	275.00	195.00	
Horton, L. C....	Civil engineer.....	300.00	156.00	Gave up permanent come here.
Ilg, George M...	Assistant structural engineer	225.00	(*)	
MacKendrick, F. R.	Estimator.....	300.00	200.00	Do.
Manning, J. H..	Chief engineer.....	750.00	700.00	
Maxfield, S. E..	Assistant mechanical engineer.	333.33	375.00	
Meigs, John....	Dredging engineer.....	1,000.00	833.33	In private practice.
Murphy, Leo O	Assistant civil engineer.....	225.00	200.00	
Osgood, H. W..	Electrical engineer.....	350.00	375.00	
Pope, Joseph...	Mechanical engineer.....	325.00	275.00	Annual increase.
Porter, Capt. L. H.	Superintending captain (at present in fabricating department).	500.00	358.00	
Reeve, L. N....	Assistant structural engineer	275.00	225.00	
Sanders, John, jr.	Assistant to chief engineer..	312.50	333.33	
Skinner, Ramsey.	Assistant sanitary engineer..	600.00	(1)	
Smith, B. L....	Utility engineer.....	300.00	235.00	
Stirrat, Capt. Wm.	Assistant to superintending captain.	300.00	175.00	Plus subsistence.
Strachan, John.	Marine engineer (adviser on purchase of marine equipment; will be superintending engineer during installation of machinery and running of trial trips.)	500.00	275.00	
Tandy, Walter L.	Railroad engineer.....	200.00	150.00	
Wisner, R. R...	Assistant electrical engineer.	200.00	130.00	
General manager's office (W. O. No. 102):				
Bunce, H. L...	Secretary to general manager.	300.00	208.34	Annual increase; gav nent home to come l
Canada, W. J..	Engineering assistant to general manager (assistant to Snyder regarding contracts, etc.)	375.00	275.00	
Clark, C. M....	Assistant to general manager and assistant secretary to corporation (legal contract end).	541.67	458.33	Annual increase.
Goodenough, W	General manager.....	2,083.33	1,500.00	Annual increase; gav nent home to com crease in responsil
Eustis, L. E...	Assistant to general manager; executive assistant.	550.00	400.00	Annual increase; gav anent home to come
Kemp, Wm. 2d	Progress assistant (assistant to Veltfort).	200.00	166.67	

[1] Resigned.

American International Shipbuilding Corporation—Continued.

Name.	Position.	Rate per month at present.	Rate per month previous to entering employ.	
General Manager's office (W. O. No. 102—Continued.				
Lovekin, L. D.	Consulting engineer	1,125.00	416.67	Plus bonus.
Oviatt, H. C.	Transportation manager	1,250.00	550.00	
Ross, W. G.	Engineering assistant (assistant to Snyder regarding contracts, etc.)	416.66	316.66	Annual increase; gave up permanent home to come here.
Schobinger, George.	Assistant progress engineer (assistant to Veltfort).	200.00	180.00	
Sherman, Chas. G.	Assistant in general manager's department (assistant to Snyder regarding contracts, etc.)	333.33	400.00	
Snyder, A. L.	In charge of interrelations with Shipping Board.	625.00	620.00	
Van Bibber, A. E.	Assistant to general manager in charge of organization matters.	750.00	500.00	Plus bonus.
Veltfort, T. E.	Progress engineer	300.00	200.00	Annual increase; gave up permanent home to come here.
Woods, Walter H.	Assistant to Van Bibber	300.00	(*)	
Hunt, R. L.	Publicity assistant	666.66	416.67	
Pierce, D. T.	Publicity manager	833.33	1,000.00	
Reed, Thomas B.	Publicity assistant	500.00	500.00	
Office management (W. O. No. 103):				
Blake, N. H.	Assistant office manager	200.00	(*)	
Endicott, T. H.	Office manager	375.00	333.33	Returned after service in France.
Oldaker, W. I.	Assistant to office manager (in charge of telephone service).	200.00	Varied.	
Porter, H. E.	Assistant office manager	200.00	150.00	
Works management (W. O. No. 104):				
Abrahamson, L. R.	Progress engineer (assistant to Veltfort).	225.00	200.00	Plus bonus.
Andrews, J. D.	Assistant works manager	1,000.00	750.00	
Anthony, H. F.	Chief job engineer	416.67	300.00	Annual increase; gave up permanent home to come here.
Baldwin, C. W.	Assistant storekeeper (in charge of checking cars).	225.00	200.00	
Barden, James	Progress engineer (assistant to Veltfort).	250.00	300.00	
Barter, H. H.	Utility superintendent (sewers, water, light, and roads).	500.00	(*)	
Bayne, C. W.	Assistant superintendent, trucks and autos.	250.00	200.00	Plus commission.
Bird, E. M.	Traffic manager	300.00	250.00	
Black, Edgar N.	Assistant storekeeper	225.00	.....	
Blake, Paul	General superintendent of ways and wet basins.	625.00	666.67	
Brayton, L. F.	General superintendent of material.	833.33	.....	Came from private practice.
Brookfield, Capt. E. W.	Adjutant of guards	300.00	155.00	
Carr, T. A.	Works manager	833.33	700.00	Annual increase; gave up permanent home to come here.
Catherman, H. Y.	General car foreman	200.00	125.00	
Clark, J. H.	Superintendent of miscellaneous construction (grading and buildings).	416.66	333.33	Annual increase; gave up permanent home to come here.
Coggshall, F. H.	Superintendent of materials (assistant to Lynch).	200.00	125.00	
Comer, R. O.	Assistant storekeeper	275.00	225.00	Plus bonus.
Considine, J. B.	Superintendent passenger service.	250.00	200.00	
Celterill, J. R.	Captain of guard	250.00	233.33	
Crouse, W. T.	Chief clerk of stores department.	225.00	150.00	
Davidson, Ole.	Superintendent of railroad construction (assistant to Locke).	300.00	(*)	

American International Shipbuilding Corporation—Continued.

Name.	Position.	Rate per month at present.	Rate per month previous to entering employ.	
Works management (W. O. No. 104)—Coutinued.				
Dick, D. D....	Special assistant to works manager.	$300.00	$200.00	Annual increase; gav nent home to come
Diver, Edward W.	Assistant fire chief.....	209.17	125.00	
Donaldson, F..	Construction manager.....	750.00	850.00	Plus bonus.
Dranfield, Thos.	Estimater (assistant to Veltfort).	210.00	175.00	
Egglestone, F. B.	Chief clerk.....	200.00	150.00	
Evans, J. B....	Assistant superintendent on piling.	300.00	400.00	
Farley, M. M..	Assistant to construction manager (assistant to Donaldson).	300.00	225.00	
Field, F. T....	Superintendent marine service.	300.00	208.33	
Fleming, F. G..	Superintendent of records and statements (assistant to Brayton).	400.00	316.66	
Fortune, Wm. B.	Superintendent of ship assembling.	1,000.00	833.33	
Fowler, Geo. E.	Warehouse foreman.....	200.00	150.00	
Gallaher, F. F..	Shops manager.....	833.34	775.00	
Greenhood. B. J.	Progress engineer (leaving Jan. 1).	200.00	.....	Up to $500 monthly.
Groesbeck, G. R.	Progress photographer.....	225.00	125.66	Annual increase; gav nent home to come
Harris, B. W...	Assistant to works manager..	1,000.00	.....	Varied partnership
Harris, Leo B..	Charge of construction equipment.	625.00	.....	
Hartenstein, Fred.	Superintendent of transportation.	400.00	350.00	
Henry, R. S...	Assistant engineer.....	200.00	168.00	
Ingham, W. B.	Stores department.....	250.00	250.00	
Jones, W. T....	Captain of police.....	200.00	(*)	
Jordon, E. E...	Yardmaster.....	200.00	190.00	
Kiefer, A. W...	Progress engineer.....	250.00	200.00	
King, E. C.....	Checking wage rates.....	225.00	145.00	
Kirby, W. S...	Assistant storekeeper.....	250.00	(*)	
Larry, W. I.....	Transportation superintendent.	400.00	208.33	
Lawry, Melvin.	Marine superintendent.....	250.00	150.00	
Lever, G. S....	Special fire and police protection (inside man).	250.00	(*)	
Littlejohn, R. G	Office engineer.....	200.00	(*)	
Locke, W. L...	Special assistant works manager.	833.33	850.00	
Ludwick, E. E.	Assistant progress engineer..	250.00	.....	No specific rate.
Ludwick, F. J..	.....do.....	225.00	200.00	
Lynch, J. E....	Assistant superintendent of stores (assistant to Brayton).	400.00	250.00	Plus commission
Macbeth, H. A.	Material supervisor.....	225.00	335.00	
Martin, J. T....	Manufacturing manager ship construction.	1,250.00	1,000.00	Plus bonus.
Merrill, C. H. S.	Office manager at Hog Island.	200.00	125.00	Annual increase; gav nent home to come
Minot, S. W....	Assistant fire chief.....	200.00	(*)	
Meskill, J. J....	Fire chief.....	333.33	175.00	
Mesny, R. B...	Assistant superintendent of labor, Hog Island.	300.00	200.00	
McDill, R. D...	Assistant storekeeper.....	300.00	(1)	
McDonald, Alex	Assistant superintendent pump plants.	250.00	300.00	
McLane, W. L..	Assistant engineer to Anthony.	200.00	150.00	
O'Neill, A. J....	Material clerk.....	200.00	(*)	
Page, F. H.....	Assistant storekeeper.....	250.00	187.50	
Parkinson, R. L.	.....do.....	250.00	250.00	
Patterson, G. G.	Master mechanic.....	333.33	100.00	
Pearsoll, W. R.	Assistant in office to Merrill.	200.00	180.00	
Pearson, R. L..	Superintendent railroad yard.	333.33	250.00	

[1] Resigned.

American International Shipbuilding Corporation—Continued.

Name.	Position.	Rate per month at present.	Rate per month previous to entering employ.	
Works management (W. O. No. 166)—Continued.				
Pierce, E. H.	Engineer building department.	$225.00	$300.00	
Rainsmar, C. W.	Chief requisition clerk	225.00	625.00	
Redfield, J. E.	Assistant superintendent pump plants.	250.00	200.00	
Rouse, D. W.	General foreman	200.00	165.00	
Robinson, H.	Field engineer	225.00	250.00	Plus bonus.
Roussin, W. W.	Assistant to Davidson	225.00	291.67	Plus dividends.
Rust, J. W.	Engineer	225.00	250.00	
Salisbury, Ed. V.	Superintendent trucks and autos.	416.67	333.33	
Schoche, A. W.	Material engineer (assistant to Brayton).	333.33	(?)	
Sinclair, Major A.	Superintendent of guards	450.00	315.33	
Slack, Frank E	Yardmaster	200.00	165.00	
Thornburg, T. R.	Labor manager at works	416.66	305.00	
Tolmoll, H. I.	Material engineer (assistant to Brayton).	200.00	200.00	
Towne, E. S.	Assistant field engineer to Anthony.	200.00	(?)	
Tuell, S. B.	General utility superintendent (assistant to Burter, operation and maintenance).	416.67	383.16	Gave up permanent home to come here.
Wagner, G. M.	Assistant storekeeper	250.00	166.00	
Webb, B. W.	do	200.00	140.00	
Weston, W. B.	Field engineer (assistant to Anthony).	250.00	(?)	
Wheeler, L. W.	Assistant storekeeper	250.00	.....	In business for self.
Accounting Department (W. O. No. 165):				
Arthur, Harry A.	Second assistant treasurer	300.00	416.67	Annual increase and gave up permanent home to come here
Bringham, W. A.	Paymaster, Hog Island	266.33	200.00	
Burnett, George P.	Chief pay roll clerk	200.00	175.00	
Dow, W. W.	Assistant treasurer	833.33	833.33	Necessary to obtain services
Easley, H. E.	Chief clerk	300.00	300.00	
Fisk, C. R.	Assistant chief timekeeper	225.00	225.00	
Isett, J. Warren	Assistant to insurance manager.	300.00	375.00	
Kelly, J. A.	Chief timekeeper	300.00	300.00	
Kline, E. C.	Assistant chief timekeeper	225.00	225.00	
Lovejoy, W. C.	Division timekeeper	250.00	300.00	
McDaniel, D. L	Assistant works accountant	275.00	275.00	
McElroy, J. C.	Cashier at Hog Island	300.00	300.00	
McMahon, J. A.	Paymaster at Hog Island	225.00	300.33	
Murray, A. T.	Assistant cashier at Hog Island	300.00	166.00	
O'Brien, John E.	Insurance manager	250.00	300.00	Annual increase and gave up permanent home to come here.
Sealy, J. V.	Chief paymaster, Hog Island	300.00	300.00	Not with us; had to pay to obtain his services
Thompson, C. H.	Assistant chief clerk	283.33	225.00	
Vaughn, E. M.	Cashier	266.33	150.00	
Ward, H. H.	Assistant works accountant	250.00	300.00	
Whitney, F. Q.	Cost accountant	300.00	300.00	
Employment Department (W. O. No. 168):				
Adams, Arthur M.	Surgeon	375.00	.....	Private practice.
Aitken, R. W.	Manager, Hog Island, employment office.	400.00	300.00	
Bay, C. R.	Real estate and assistant to Canterbury.	275.00	170.00	Annual increase and gave up permanent home to come here.
Braid, Albert P.	Instructor on shops' cranes	200.00	333.33	
Canterbury, R. C.	Superintendent on housing	500.00	.....	Private business.

American International Shipbuilding Corporation—Continued.

Name.	Position.	Rate per month at present.	Rate per month previous to entering employ.	
Employment Department (W. O. No. 106)—Contd.				
Davis, Phillip..	Assistant to employment manager.	$500.00	$400.00	
Fultz, C. A.....	Assistant to employment superintendent.	250.00	300.00	
Gibson, P. B...	Instructor of training school on ships' crafts.	250.00	250.00	
Holmes, Wm. F	Surgeon.....	350.00	.....	Private practice.
Kennedy, D. R.	Employment manager.....	1,000.00	875.00	Plus extras.
McConaghy, R. A.	Assistant superintendent of housing.	200.00	.....	In business for self.
Mifflin, S. W...	Welfare assistant.....	200.00	200.00	
Moreland, J. R.	Real estate engineer (temporary).	300.00	500.00	
Morison, Rodney, jr.	Assistant to employment manager.	300.00	350.00	
Pratt, J. A.....	Superintendent of ships' crafts training school.	500.00	(*)	
Reilly, John J..	Chief surgeon in general charge of health and sanitation.	625.00	1,500.00	$50 per day.
Roddy, Geo. W	Chief of sanitation.....	225.00	300.00	
Roots, W. H. P.	Assistant to employment manager.	400.00	416.66	
Schlaff, Herman.	Surgeon.....	225.00	416.67	
Slaughter, C. H. P.	Welfare assistant.....	200.00	416.67	
Whittaker, R. W.	Real estate and assistant to Canterbury.	350.00	(*)	
Purchasing Department (W. O. No. 107):				
Allen, C. R.....	Chief clerk.....	250.00	208.33	
Barker, Chas. M	Buyer.....	200.00	290.00	
Borschneck, C. F.	.....do.....	200.00	175.00	
Carroll, F. M...	Assistant chief expeditor....	200.00	150.00	
Coffin, L. R....	Special assistant.....	500.00	416.67	Annual increase and p manent home to co
Darlington, G. P.	Chief expeditor.....	300.00	300.00	
Dunn, E. L....	Chief requisition clerk.....	250.00	200.00	Do.
Eggers, C. W...	Traffic manager.....	500.00	708.33	
Forde, T. J.....	Assistant manager of purchases.	400.00	200.00	Annual increase and p manent home to Necessary to indu move from Boston phia.
Fryer, Herbert.	Buyer.....	333.33	433.33	
Gent, L. W....	Chief clerk traffic division...	200.00	125.00	
Hall, L. C.....	Head buyer, miscellaneous..	250.00	160.00	Annual increase and p manent home to co
Hamilton, R. E	Manager of purchases.....	1,000.00	816.67	Previous rate with St ster; increase neces tain services.
Johnston, L. F.	Head buyer, electrical.....	225.00	200.00	
Linehardt, C., jr.	Buyer.....	200.00	200.00	
Lodge, D. W...	Assistant to purchasing manager.	250.00	185.00	
Newton, Geo. W.	Buyer.....	250.00	200.00	
Nooman, E. M.	Head buyer, steel products.	300.00	231.00	Plus expenses.
Snyder, H. E..	Buyer.....	200.00	266.67	
Stapleton, J. F.	Head commissary buyer (must be raised to $250).	200.00	150.00	
Thomas, W. H.	Buyer.....	200.00	150.00	
Young, Thos. S.	General assistant.....	250.00	208.33	
Commissary Department (W. O. No. 110):				
Hartzell, P. N.	Commissary manager.....	416.66	250.00	Necessary to retain s
Weaver, C. P..	Assistant commissary manager.	200.00	200.00	

American International Shipbuilding Corporation—Continued.

Name.	Position.	Rate per month at present.	Rate per month previous to entering company.	
Fabricating Department W. O. No. 20:				
Anderson, J. H.	Electrical engineer, building of ships.	[illegible]	[illegible]	Annual increase and gave up permanent home to come here.
Armstrong, R. F.	Chief checker	[illegible]	[illegible]	
Bailey, O. P.	Structural steel inspector	[illegible]	[illegible]	
Bohnson, H. G.	Structural engineer	[illegible]	.....	Private consulting practice.
Bates, Chas. E.	Squad chief on drafting	275.00	[illegible]	
Bumbower, D. E.	Clerk	[illegible]	[illegible]	
Blankenberg, G. S.	Assistant to manager of machinery.	[illegible]	[illegible]	
Brown, Dennis F.	Structural steel inspector	[illegible]	[illegible]	
Brown, F. L.	Material clerk (bills of material).	[illegible]	[illegible]	
Burgess, H. F.	Structural steel inspector	[illegible]	[illegible]	
Carver, F. A.	Steel inspector	[illegible]	[illegible]	
Cunningham, J. E.	Superintendent of progress	[illegible]	[illegible]	
Davidson, T. E.	Assistant erector of machinery (now in designing office, Camden).	[illegible]	[illegible]	
Davis, S. J.	Inspector (steel)	250.00	220.00	
Dawson, J. W.	Assistant to manager of hull fabrication.	[illegible]	(1)	
Dawson, Geo. S.	Engineer, assistant to Balcom.	333.33	275.00	
Denbaugh, J. B.	Material clerk (bills of material).	[illegible]	[illegible]	
Eckman, O. J.	Steel inspector (structural).	250.00	(*)	
Fischall, L. F.	Structural steel inspector	250.00	150.00	
Dyer, E. F.	Assistant machinery superintendent.	[illegible]	[illegible]	
Ewing, W. M.	Structural steel inspector	300.00	(*)	
Fellows, A. E.	Correspondence clerk	225.00	375.00	
Fourne, J. M.	Material inspector	300.00	(1)	
Gillette, G. L.	Manager hull fabrication	1,250.00	500.00	Plus interest in business came at a distinct sacrifice.
Gillingham, G. L.	Inspector, fabrication	300.00	(1)	
Gilmes, E. S.	Office engineer in charge of drafting and bills of material.	450.00	348.88	Annual increase and gave up permanent home to come here.
Gribble, W. H.	Steel inspector	300.00	(*)	
Harkrader, C. L.	Superintendent of material (assisting Gillette).	500.00	.....	Private business.
Hasenblag, H. B.	Leading draftsman (fabricating details).	275.00	225.00	
Heilmus, Peter E.	Structural steel inspector	250.00	(1)	
Hill, Mark H.	Assistant superintendent of material.	333.33	300.00	
Hoff, Geo. K.	Inspector (steel)	250.00	225.00	
Homsberger, S.	do	250.00	140.00	
Hutchinson, J. M.	do	250.00	(1)	
Jenkins, W. George.	Assistant machinery superintendent (hull fittings).	350.00	208.33	Plus bonus.
Johnson, A.	Structural steel inspector (following template making).	250.00	150.00	
Johnston, E. V. D.	Assisting secretary, fabricating department.	400.00	(*)	
Kowalski, T. J.	Production superintendent on machinery fabrication (piping).	416.67	300.00	
Koch, Charles	Head draftsman	200.00	165.00	
Little, Wm. H.	Requisition engineer	275.00	300.00	
Lowe, H. L.	Fabricating engineer	500.00	375.00	Annual increase and gave up permanent home to come here.
Meixell, C. S.	Steel inspector	300.00	(*)	
Meyers, J. S.	Assistant engineer	225.00	200.00	
McConnell, J. L.	Structural steel inspector	250.00	(1)	
McGranigham, J. L.	do	250.00	175.00	

[1] Varied. [*] Resigned.

American International Shipbuilding Corporation—Continued.

Name.	Position.	Rate per month at present.	Rate per month previous to entering employ.	
Fabricating Department (W. O. No. 210)—Contd.				
McKinley, Wm.	Assistant structural engineer (assistant to Balcom).	$350.00	$250.00	
Nelson, J. A....	Assistant manager machinery fabrication (assistant to Carl Thomas).	500.00	(1)	
Pope, G. W....	Assistant manager hull fabrication (assistant to Gillette).	750.00	400.00	
Primrose, C. L.	Chief draftsman.....	350.00	300.00	
Raidabaugh, J. A.	Machinery engineer.....	300.00	(1)	
Richmond, R. N.	Leading draftsman.....	250.00	195.00	
Rooney, Joseph	Steel inspector.....	200.00	165.00	
Rowse, W. C...	Assistant superintendent of production (machinery fabrication, ship's fittings).	300.00	166.66	
Santry, Jos.....	Superintendent machinery fabrication (auxiliary machinery).	625.00	.....	Private buisness: m tinct sacrifice.
Simpson, Geo..	Inspector.....	292.00	(1)	
Smith, E. Y...	.....do.....	300.00	(*)	
Smith, O. C....	Production superintendent (assistant to Gillette).	833.34	500.00	Plus interest in earn
Stewart, G. W.	Structural-steel inspector....	250.00	(1)	
Stewart, S. P..	Assistant engineer.....	250.00	(1)	
Thomas, Carl..	Manager machinery fabrication (chief marine engineer).	1,250.00	.....	Consulting engineeri
Twichell, L....	Assistant production superintendent (assistant to O. C. Smith).	300.00	200.00	
Varker, Wm...	Assistant secretary of department.	400.00	.....	Business for self.
Waite, George..	Assistant engineer.....	275.00	166.67	

[1] Varied.

STATEMENT OF MR. JOSEPH P. COTTON, OF NEW YORK (

The CHAIRMAN (continuing). Mr. Cotton, will you sta name and occupation?

Mr. COTTON. Joseph P. Cotton, of New York City. I w merly practicing law in New York—up to the time of the be of the war.

The CHAIRMAN. You have no office now in New York?

Mr. COTTON. I have an office, but I am not there.

The CHAIRMAN. How long have you been engaged in the of law, Mr. Cotton?

Mr. COTTON. I think it is 15 or 16 or 17 years.

The CHAIRMAN. You became counsel for the Emergenc Corporation?

Mr. COTTON. I do not think I ever had that title. I thin special counsel for the Shipping Board. I was acting for th Corporation.

The CHAIRMAN. When did you begin that service?

Mr. COTTON. I have not the dates. It was some time befo Goethals came to Washington.

The CHAIRMAN. How long before, if you can remember?

Mr. COTTON. A month perhaps; two or three weeks or a month.

The CHAIRMAN. So you were in that position before Gen. Goethals came?

Mr. COTTON. Yes, sir.

The CHAIRMAN. And you continued up to what time?

Mr. COTTON. Two or three weeks after he left. I have not the dates exactly; that would be some time in August.

The CHAIRMAN. You resigned then?

Mr. COTTON. Yes; when Admiral Capps came in everybody said that they would be glad to get out if he wanted to fill it with new men, and he did take that course.

The CHAIRMAN. Did you have a staff of your own—assistants under you, Mr. Cotton?

Mr. COTTON. That was being organized slowly. By July there was a law board of five or six lawyers there doing that work. They were not really under me—I had no official title; it was an organization of fellows working together.

The CHAIRMAN. Did you have to do with the Hog Island contract?

Mr. COTTON. I had to do with the negotiations in regard to Hog Island and the formulation of contracts; yes, sir; but the Hog Island contract was not signed until long after we left there.

The CHAIRMAN. Was it prepared before you left?

Mr. COTTON. Drafts were prepared, but I do not think that they were the paper that was finally signed. It was the same general idea. I understand the general idea was signed, but I never saw the actual contract.

The CHAIRMAN. Whom did you deal with in your negotiations?

Mr. COTTON. I dealt with about everybody in that situation.

The CHAIRMAN. I mean as to the Hog Island plant?

Mr. COTTON. On the other side, I dealt with the officials of the American International Corporation, the members of Stone & Webster, and representatives of the New York Shipbuilding Co.

The CHAIRMAN. Will you name the individuals with whom you dealt?

Mr. COTTON. I may not have them all in mind. For the American International, the president, Mr. Stone; Mr. Connick; Stone & Webster, Mr. Robinson, Mr. Muhlford; New York Shipbuilding, Mr. Baldwin. There may have been more, but these I think were the important ones. Also, some time or other, they had lawyers: Mr. Cutcheon and Mr. Begg.

The CHAIRMAN. How did those negotiations begin, and how far had they progressed when you left?

Mr. COTTON. May I go back a little way and try to give you a picture of it?

The CHAIRMAN. Yes.

Mr. COTTON. At the beginning, the first policy was to let as many contracts as they could for the steel boats in the existing yards, and then to let contracts for wooden yards and wooden boats, and then to make plans for speeding up the work in the existing yards by the commandeering. Then, to supplement that, it was realized that those sources would not give sufficient tonnage, taken altogether, to meet the demand, or come anywhere near meeting the demand, and the problem then was to create shipyards which could be ent

without drawing labor from the existing yards. In a word, that w the problem.

As the solution of that, this idea of the fabricated ships w formulated. In the working out of that idea there were a number things to be considered. The first was, whether there was fabricati capacity to get the steel from the plants—because there were a gre many other Government enterprises with calls on steel.

Also, to make sure that the fabricating plan was possible—that a ship could be planned which would be so far standardized th practically it could be constructed without marine labor. And th it was necessary to get some idea of what cost that could be do for.

The original negotiations were simply instructions to the Su marine Boat and the American International, who had come to t Fleet Corporation to see if the idea was feasible. So those we the first negotiations by which they went out and studied to see the idea was feasible.

Senator NELSON. Well, who negotiated for the American Inter national? Who started it?

Mr. COTTON. Mr. George A. Baldwin.

Senator NELSON. He was the person who first came with the pro posal for it?

Mr. COTTON. If I may go back one minute—the first man wa Mr. Sutphen, of the Submarine Boat Co.

Senator NELSON. Who?

Mr. COTTON. Mr. Sutphen of the Submarine Boat Co.; and very soon after him, Mr. Baldwin came down with some idea.

Senator NELSON. Yes.

Mr. COTTON. It was so big that those two men joined forces, prac tically, in combing the field to see if they could get the steel and see if they thought the plan was feasible. For a month, perhaps, tha went on with no talk of price at all.

Then there was another man, Mr. Worden, who was a very im portant factor in the negotiations. I had forgotten about him.

Senator NELSON. Where was he from?

Mr. COTTON. Submarine Boat. They were acting together.

Senator NELSON. Was the Submarine Boat Co. affiliated with th American International in any way?

Mr. COTTON. Not so far as I then knew, or now know.

Senator NELSON. Well, there were some other companies affiliate with it, were there not?

Mr. COTTON. With the American International?

Senator NELSON. Yes.

Mr. COTTON. That came as a three-headed proposition; the Ameri can International proposition was a proposition of the America International together with Stone & Webster together with the Ne York Shipbuilding Co.; those three acted together.

Senator NELSON. When was that corporation created?

Mr. COTTON. It was an existing corporation; it was not a very ol one. It had been in existence a year or more; I do not know ho long.

Senator NELSON. Had they built any ships themselves?

Mr. COTTON. Not that I know of: I feel pretty sure they had no

Senator NELSON. So far as the American International was concerned and so far as shipbuilding was concerned, it was what might be called a "paper company," was it not?

Mr. COTTON. You would not be right in saying it was a paper company, but you would be right in saying that it was not a shipbuilding company.

Senator NELSON. Well, if it was not a shipbuilding company, what was it?

Mr. COTTON. The general idea was that it was a financing and engineering corporation that went all over the world building projects—taking up projects and building them and financing them.

Senator NELSON. Wherever they could get them?

Mr. COTTON. Wherever they could get them.

Senator NELSON. Wherever they could get hold of a scheme, they were ready to take it?

Mr. COTTON. That is about the situation.

Senator NELSON. Had they got hold of any scheme before this that company, I mean?

Mr. COTTON. You are asking me about things that I do not know intimately. But I do know that they had done something. They had a railroad being constructed in Uruguay, and they had been looking at Chinese railroad projects and other things of that kind: I do not know what.

Senator NELSON. That is in the railroad line, but not in the shipbuilding line.

Mr. COTTON. I never heard of them in the shipbuilding line before except that they had bought in a ship operating line, but not the construction end. Now, they may have been constructing ships, but certainly not on a large scale, and I did not know of it.

The CHAIRMAN. Did they buy the Pacific Mail, with which W. R. Grace & Co. were connected?

Mr. COTTON. I never went into that transaction. Speaking generally, this is what they did: They bought into the International Mercantile Marine, and they affiliated with Grace & Co.: I think they took a part interest with Grace in the Pacific Mail boats. But I never studied those ramifications.

The CHAIRMAN. They were originally organized for promoting foreign trade, were they not?

Mr. COTTON. They made money by the promotion of foreign trade: yes, sir.

Senator NELSON. Who were the principal promoters connected with this American International Corporation?

Mr. COTTON. Again you are asking me something that I only know from my connection there. I would not think they were promoters: I would not use that name as applied to them.

Senator NELSON. I mean the principal promoters of that enterprise: I use the word only in that sense.

Mr. COTTON. Without doubt they were the men I have named here. Then it came to the question of trying to get a contract with them.

Senator JOHNSON. Do you want a list of directors of that company, Senator Nelson?

Senator NELSON. Yes: I should like to have that.

Senator JOHNSON. I have investigated, and found a list in the "Directory of Directors" for 1917: and the following are the direc-

tors of the American International Corporation: J. Ogden Armour, George J. Baldwin, Charles A. Coffin, William E. Corey, Robert Dollar, Pierre S. du Pont, Joseph P. Grace, Robert F. Herrick, Otto H. Kahn, Robert S. Lovett, Ambrose Monell, Henry S. Pritchett, Percy A. Rockefeller, John D. Ryan, William L. Saunders, James A. Stillman, Charles A. Stone, Guy E. Tripp, Theodore N. Vail, Frank A. Vanderlip, Edwin S. Webster, Albert H. Wiggin, Beekman Winthrop, and William Woodward.

Those are the names given in the "Directory of Directors" for 1917–18 as directors of the American International Corporation.

Senator NELSON. To use a nautical phrase, they have certainly "boxed the compass."

Mr. COTTON. That would be about the same as the list of witnesses in the Pujo investigating committee hearings. [Laughter.] Shall I proceed, Mr. Chairman?

The CHAIRMAN. Yes.

Mr. COTTON. The question, then, was as to what financial arrangement should be made in regard to the construction of fabricated ships.

Senator NELSON. Let me ask you this question before you discuss that: Did these men, when they came down here, to get this contract, appear to be pretty eager about it?

Mr. COTTON. Why, I should say about as eager as usual.

Senator NELSON. Yes; go on.

Mr. COTTON. My first instructions were to see if we could formulate the contract for a lump sum. And estimates of cost, rough estimates, were presented by the companies. The negotiations with both the American International and the Submarine Boat Co., and Mr. Harriman's company were all proceeding practically together.

The CHAIRMAN. The Merchant's?

Mr. COTTON. Yes, sir.

Senator NELSON. The Merchant Company and the Submarine?

Mr. COTTON. Yes, sir; they were all proceeding together.

Senator HARDING. Now, let me get that clear: The first proposal was to build ships?

Mr. COTTON. The first instructions were to see if we could get a flat contract.

Senator HARDING. Not with them as agents of the Government, but to build ships?

Mr. COTTON. Yes; the kind of contract that we were used to.

Senator HARDING. Yes.

Mr. COTTON. The figures presented were higher than seemed reasonable, on what information there was as to cost; they ran up to $170 or $180 a ton.

The CHAIRMAN. Were they about the same for each of those companies?

Mr. COTTON. No; they varied. Speaking generally, the Submarine was the lowest; the American International the next; and the Merchant Company, which then did not exist, the highest.

Senator NELSON. Did those plans contemplate in each case the building of the shipyard by the Government?

The CHAIRMAN. No.

Mr. COTTON. In the first instance, the attempt was made to have a contract that they should do it all. That was the first idea.

Senator NELSON. That the Government should do it all?
Mr. COTTON. No; the companies.
Senator NELSON. That the companies should do it all?
Mr. COTTON. Yes, sir.
Mr. COTTON. Yes. The figures presented, as I say, were high—absurdly high—and none of the contractors who had been contracting on such a basis were willing to take the fundamental risk: that is, the risk of materials, the risk of labor. This was the time when there was the uncertainty about the steel prices that had not yet been fixed. None of them were willing to take that risk. So presently what they were proposing was a contract for a fixed price, under which actually they took none of the very substantial risks.

There was this to be said for that position, that nobody in the United States was rich enough to take those risks: I mean, the risks were too enormous. Our instructions first were to do what we could and see what we could get on another form of contract: that is, a contract where, at least, if the Government bore the risks the profit would be limited. The questions were then discussed, of course, as to price and as to profit.

Senator NELSON. Did that modification that you referred to contemplate that the Government was to pay the expenses of building the yard and equipping it?

Mr. COTTON. There was a change of basis. In one they said, We will build for such and such a price. That price was outrageous, and so we went, naturally, to the other basis: of the Government doing the whole thing.

Senator NELSON. And they putting in nothing?

Mr. COTTON. They putting in nothing, or practically nothing.

Senator NELSON. I want to ask you another question that may not be in place, but I think it comes in here. What was the capital of this corporation, The American International?

Mr. COTTON. Now you are asking me for figures that I have not thought of for a long while, but I am pretty sure I know—$50,000,000.

Senator NELSON. How much of it was paid in?

Mr. COTTON. Half of it, I suppose.

Senator NELSON. Was that really paid in in cash?

Mr. COTTON. I think it was, sir. Do you mean to ask whether it was a paper corporation?

Senator NELSON. Yes.

Mr. COTTON. Oh, they have sins enough, but that was not one of them.

Senator NELSON. Of course, they have sins enough, but the question is what was the sin in this case? Did they actually put any money into the corporation?

Mr. COTTON. Oh, yes; I have no doubt about that. I mean, I knew of their investing in a lot of other things.

Senator NELSON. They were strong men individually?

Mr. COTTON. They had assets and they were worth a lot of money.

Senator NELSON. But had the corporation any assets?

Mr. COTTON. According to those published statements it had a great many assets of very great value.

Senator NELSON. Scattered around the world?

Mr. COTTON. No; its ownership of shipping shares alone was of very great value. I am speaking only of what I happened to know.

Senator NELSON. Now, go on with your story.

Mr. COTTON. Well, there was a discussion of the profit, and that came down, and it was formulated in a paper which, if you have ever been over this subject at all, I suppose you have had before you.

The CHAIRMAN. Were they all three proceeding together at this point, Mr. Cotton? Were you dealing with them separately, or all three at the same time?

Mr. COTTON. We were dealing with all three at the same time and trying to play one against two. I mean two out of the three had to be taken off the program, but we were dealing with all three together and not any particular two. But, practically speaking, there were no secrets from one of the negotiators to the other; it was too big for that.

Senator HARDING. You do not mean to say you were negotiating with all of them at one time collectively?

Mr. COTTON. Usually we were negotiating with them separately, but I feel sure they were telling each other.

Senator HARDING. There were no secrets?

Mr. COTTON. I do not think there were any secrets. Really I do not blame them a bit for that. For instance, there was not enough fabricating capacity to allow competition. The trouble was to get fabricating capacity to get 2,500,000 tons, and if you had got them bidding for it you would have got a dreadful situation.

The CHAIRMAN. Did you at that time go into this question with the board as to the practicability and advisability of taking up the fabricated ship? What was the result of your own investigation as to whether that was an advisable thing to do?

Mr. COTTON. May I go into that question a moment? When I say I do not think this negotiating lay all together in my hands, of course it did not; it was simply a matter I was familiar with. I heard what Mr. Powell said here the other day about the fabricated ship and what he thougt about it represented fairly, I think, the opinion of most of the shipbuilding men. The shipbuilding trade is a hand trade; it is a trade that is curiously "sot" in its ideas. They build a ship in one way, and there has been no marked change in the industry in a long while. The only real change in the industry was the experiment of Mr. Morse, who revolutionized the industry by fabricating the straight sides of the ship—that is, constructing them for assemblage.

Now, the idea of the fabricated ship not only carries out to a greater extent than in the usual ship this principle of fabrication but it does it by modifications of design. Everything in it is straight and square; that is, they change the design so it does not look like an ordinary ship in order to carry out the fabricating principle. The point of it is that the more you can fabricate and the more you can make your ship a fabricated ship the more you can do by labor that is not marine labor. When you come to bending and fitting the plates you have got to have marine labor. All the shipyards were full, and it would have done no good to take labor from one yard to another. So the basic principle of the fabricated ship was a plan under which labor other than marine labor could do it.

It was rather against the judgment of the bulk of the skilled shipbuilders, not all of them. These fellows who had gone into it were pretty sure it could be done. The ordinary shipyard works with a comparatively small number of units; that is, they build 10 ships at a time. They do not attempt production or manufacture on a big basis, and I should expect that the ordinary shipbuilder in considering this plan would simply fail to conceive it as a manufacturing project. While I listened with great interest to what Mr. Powell said, I should think the last thing in the world would have been to put this plan in the hands of a shipping man. I think it will be put in the right sort of hands; that is, engineering hands, with first-class shipping assistance.

Senator HARDING. You mean men who are not prejudiced against it?

Mr. COTTON. I am afraid the trade is plumb prejudiced against it—with all affection for the trade as I have seen it.

Senator NELSON. Did not Mr. Morse have to give up his scheme?

Mr. COTTON. No: he did not give it up. But Morse's scheme was only successful as to a certain part of the boat. They thought they had the answer to Morse's difficulty. Remember, I am not a real ship man, though——

Senator NELSON. You come as near it as some of these shipbuilders. [Laughter.]

Mr. COTTON. The ship we know has rounded bows and a rounded stern. This fabricated ship looks like a skyscraper lying down on its side.

Senator NELSON. Or a barge?

Mr. COTTON. Or a barge. It could be built by a man who could build a skyscraper. These fellows who are building it benefited by Mr. Morse's failure. Morse being unable to fabricate the curved ship. They did not try to do what he failed in, but they remodeled the ship, and it will make an awful looking ship, but they all say it will go.

Senator NELSON. Is that what these new ships will be—awful looking ships?

Mr. COTTON. Oh, they will be awful looking.

Senator NELSON. Those that they are carrying out under this contract now?

Mr. COTTON. They will be terrible looking ships.

Senator NELSON. They will look like a scow?

Mr. COTTON. Like a scow.

Senator HARDING. May I ask, Mr. Chairman, have we had at any time before the committee a draft or suggested drawing of the fabricated ship?

The CHAIRMAN. No; I think we never called for anything like that.

Mr. COTTON. Of course they exist.

Senator HARDING. You do not mean to say it is without a pointed prow?

Mr. COTTON. Not quite as bad as that, sir; no; but it has less point than any ocean-going ship you ever saw, and it is particularly scant at the stern.

Senator HARDING. No stream lines on the stern?

Mr. COTTON. None at all.

Senator NELSON. Does not that, having it scant on the stern, deprive it of steerage power?

Mr. COTTON. You are asking me questions now as to which my answer would not be of value to anybody, but they tell me not: they tell me those ships will go.

Senator NELSON. I have always understood that the rounding off of the stern of a ship in the usual manner was to give better power to the steering gear than it would otherwise have with a flat stern.

Mr. COTTON. I think you are probably right, but they tell me this will go.

Senator JONES. Whom do you mean by "they"?

Mr. COTTON. The engineers of the Submarine Boat so report, and they are good ones.

Senator JONES. What kind of engineers?

Mr. COTTON. Naval construction men. The naval constructors of the New York Ship so reported. Naval Constructor Ferris, of the Emergency Fleet, so reported.

Senator NELSON. Did Mr. Ferris recommend it?

Mr. COTTON. No; Mr. Ferris drew the plans for the ones to be built by the Submarine Boat. But Mr. Ferris did not get the idea—you mean, was it Mr. Ferris's idea?

Senator NELSON. Yes.

Mr. COTTON. No.

Senator NELSON. I mean, did he approve of this plan?

Mr. COTTON. Yes. The fabricated ship is an experiment, but the engines in it are the regular engines of a regular boat. They did not experiment except where they had to experiment, and they put in the ordinary engines.

Senator NELSON. How is the keel? Is there any difference between the keel in these fabricated ships and the ordinary steamships?

Mr. COTTON. I would rather you would look at the plans, sir, and not cross-examine me on that. Speaking generally, there is a difference. I mean, they have got a more or less flat bottom.

Senator NELSON. Is there an open keel on it?

Mr. COTTON. I do not even know what that means.

Senator JONES. Who passed on these plans for the Emergency Fleet Corporation and the Shipping Board?

Mr. COTTON. Mr. Ferris for one; and then they had a technical committee which was sitting on those plans at about the time we all got out, or were asked to get out.

Senator JOHNSON. Will you state that committee, please?

Mr. COTTON. I can not.

Senator JOHNSON. Was Mr. Baldwin a member of it?

Mr. COTTON. This same Baldwin?

Senator JOHNSON. Yes.

Mr. COTTON. Oh, no; I mean simply a committee chosen by the Shipping Board.

Senator JOHNSON. Was Mr. Baldwin a member of any committee that you are aware of?

Mr. COTTON. I am not aware of it, but he might have been. That is a matter that I could not recollect at all. I know there were other shipping men members of committees, and it might well have been that he or somebody from his yard was a member of the committee.

'or instance, Mr. Ferguson and Mr. Todd—I remember shipping men n the committees.

Senator JONES. Do you mean to say that Mr. Ferguson and Mr. 'odd passed on this?

Mr. COTTON. No; that is just what I was careful not to say; that is, . do not recollect so. I remember talking to Mr. Ferguson about this hing.

Senator JOHNSON. Returning to your contract with the American International, if you please, have you any documents, or were there any documents submitted to you, concerning the option upon the land?

Mr. COTTON. I am pretty sure I am correct in saying—you mean. their option on the Philadelphia lands?

Senator JOHNSON. Yes.

Mr. COTTON. I am pretty sure I am correct in saying there were no documents.

Senator JOHNSON. Was any examination made by you or anybody else, to your knowledge, concerning the options?

Mr. COTTON. I should not think there would have been any, and I have no knowledge of any.

Senator JOHNSON. You recall nothing of it?

Mr. COTTON. I recall none.

Senator JOHNSON. Did you yourself make an examination?

Mr. COTTON. No. I am pretty sure I would have known, and I do not know of any reason why I should have, and I do not think I did.

Senator JOHNSON. Do you recall that the preamble of your contract dealt with the acreage and with the options that were held upon the acreage by the American International?

Mr. COTTON. I do not, but it may have.

Senator JOHNSON. Do you know whether or not the American International at the time of your negotiations itself held options upon the land?

Mr. COTTON. I certainly had no real knowledge of that.

Senator JOHNSON. I will not pursue the [illegible] nothing concerning the options at all.

Mr. COTTON. I have no knowledge at all [illegible] to me that they were prepared to get Hog Island. [illegible] knowledge than that.

Senator JOHNSON. Did the representatives of the American International in their negotiations say, "We are prepared to get Hog Island"?

Mr. COTTON. I would not say they ever made [illegible] statement. For instance, I recall this that they [illegible] definite plan showing the proposed layout [illegible] Hog Island.

Senator JOHNSON. Who were the [illegible] were 846 acres of land; that [illegible] 406 in another? Do you know?

Mr. COTTON. I do not. [illegible] tion to those parties.

Senator JOHNSON. Who [illegible] recall? Do you know?

Mr. COTTON. I could not say [illegible] Stone or Mr. Connick or Mr. Baldwin.

Senator JOHNSON. One of these [illegible]

Mr. COTTON. I could not have gotten it anywhere else.

Senator JOHNSON. Did they at any time suggest to you h option was obtained or for what sum originally it was obtaine

Mr. COTTON. No; that never came to me.

Senator JOHNSON. Where did you get the figure $1,700,000 contract in relation to the option?

Mr. COTTON. I do not now even recollect that figure, but cert never got it from any independent investigation.

Senator JOHNSON. I have not stated it to you absolutely It is a trifle more than $1,700,000; between that and $1,800,00 do not recall where that figure came from?

Mr. COTTON. No. Is that figure in the draft contract whi submitted in July?

Senator JOHNSON. I may not be correct in saying that it wa

Mr. COTTON. I am speaking really of my knowledge of the c that ultimately was executed. I quitted this thing very su and I do not know what is in the contract. I doubt if th in any paper I wrote, but you may be right.

Senator JOHNSON. I will not say it is in your original draft.

Mr. COTTON. It was taken right away from all of us.

Senator JOHNSON. But undoubtedly through those negot there was more or less said about the title to the company, am endeavoring to refresh your recollection in that regard.

Mr. COTTON. No; all my recollection in that regard is tha said they did not own it. They said certain rights from the States would have to be obtained; I think it had something to c the channel. I do not even know that they said they held it selves under option.

Senator JOHNSON. Did you have anything to do with a gen named Black during the negotiations?

Mr. COTTON. I neither then nor now ever heard of the gentle

Senator JOHNSON. Or a gentleman named Bohlen?

Mr. COTTON. No; I never saw or heard of either of those me

Senator JOHNSON. Neither you nor your office made any inv tion during these preliminary negotiations concerning the t concerning the option?

Mr. COTTON. No; and may I point out that under the form tract we drew there was absolutely no reason why he should.

Senator JOHNSON. Just one other thing I want the record set straight in. The other day I was endeavoring to demo your residence here; I do not know whether you are aware Some question arose between some of the members of the com and a gentleman stated just who you were, which I endeav put into the record. Will you please state the name of your pa

Mr. COTTON. I am always very proud to do that. His n John C. Spooner.

Senator JOHNSON. Your residence has been in the city o York for how long?

Mr. COTTON. Sixteen or seventeen years.

Senator JOHNSON. Did you ever reside in the State of Minn

Mr. COTTON. No; but I take credit when I can for every thing that fellow ever did; there is a Joseph D. Cotton.

Senator NELSON. I confounded him with you.

Senator JOHNSON. How far did you progress, if you please, in respect to your negotiations with the American International?

Mr. COTTON. We progressed to this point: I drew up a draft paper with figures in it which were as low as we could get them; that is, as I could get them; not as low as I wanted, but as low as I thought they would be. And that figure Gen. Goethals was willing to say he stood for, to the extent of making it public, so that if anybody wanted to shoot at it they could shoot at it.

Senator JOHNSON. Do you remember what the figure was?

Mr. COTTON. I think that was, speaking generally, a fee of 6 per cent.

Senator JOHNSON. To be subsequently reduced, was it not, when Admiral Capps made the contract, to substantially 5 per cent?

Mr. COTTON. Yes. May I go on? When Gen. Goethals made that statement he made it with the hope and, I think, with the feeling that that might be reduced by publicity and by pressure on these people. I know he felt the absolute necessity of going forward at once, because we all felt that, aside from the bare necessity, the actual loss of tonnage per day was much greater than any question between five and six or between five and four. May I say one thing more about that? I do not mean to say we were not responsible for that figure, but do not also think it was a figure we liked.

Senator JOHNSON. I do not give a rap about the figure if we get the ships. The extravagance at Hog Island we could forgive if we got the ships, but when we do not get the ships and we have the extravagance, too, that is the particular place where I feel we have a right to have some little irritation.

Senator VARDAMAN. There is some excuse for it.

Senator JOHNSON. Yes; there is an excuse for some little irritation on our part. Did any of these gentlemen with whom you were negotiating concerning this contract with the American International deal with you respecting material that was to be furnished for the building of these ships?

Mr. COTTON. As to where to get it?

Senator JOHNSON. Anything concerning it?

Mr. COTTON. A list of material and material prices was submitted, I recall, by the Submarine Boat and, I am pretty sure, the American International, for submission to the purchasing agent of the Fleet Corporation. And it was submitted and was being checked up, I think, when our career ended.

Senator JOHNSON. Now, this list of materials thus submitted by these two corporations with which you were about to contract referred to material coming from what particular places?

Mr. COTTON. I do not think it showed the sources, excepting the steel going in there. That was shown.

Senator JOHNSON. Were they from particular corporations or institutions in which these gentlemen were interested?

Mr. COTTON. That I have now no way of knowing, and would not know. I remember distinctly that list did not show sources. I would hesitate to say where these gentlemen were interested. Some of their connections you would find quite far-reaching.

Senator JOHNSON. It is rather safe to say that many of them were interested in the furnishing of the materials as well as in the building of the ships, would it not? And I say that not invidiously at all

Mr. COTTON. Oh, it would not greatly surprise me if that we case, sir.

Senator JOHNSON. The names would indicate that, would they

Mr. COTTON. They certainly do.

Senator JOHNSON. So the fact of the matter is we were obts from the gentlemen with whom we were contracting the mater well which they were to put together?

Mr. COTTON. Now, I am trying to fence one bit on that——

Senator JOHNSON. I understand that.

Mr. COTTON. That is so, and yet it is not so. If the busines gone forward with the contract proposed, no material purc could be made without the approval of the Government repre tive, and no Government representative, however careless, coul to check the material price against the market for that mater

Senator JOHNSON. I am not questioning prices at all.

Mr. COTTON. So I would say you were probably right.

Senator JOHNSON. Eliminating entirely the question of m prices, and assuming them to be entirely correct, the fact i material would come from institutions in which these very gentl were interested?

Mr. COTTON. Not only possibly but probably. Of course I d know their interests; you understand that?

Senator JOHNSON. Did you make any investigation to dete just how much work would be done inside the yard and how outside?

Mr. COTTON. I did not, but the engineer's examination of the revealing the plant as a fabricating plant, discloses practically engineer the nature of the work to be done inside the yard.

Senator JOHNSON. Can you state approximately what wa proportion that would be done outside and the proportion that be done inside, from your recollection of what transpired at time?

Mr. COTTON. I can not. I do not know, except that the fabric of the various parts in general would be done outside, and the would be in itself almost a third of the material expense. A thi a half of the actual work of putting together these boats wou done on the made land at Hog Island. You know, you had all other figures.

Senator JOHNSON. It might be a 50-50 proposition?

Mr. COTTON. It might, but my judgment would not be of any as to that.

Senator JOHNSON. The reason I asked concerning that is th paid 5 or 6 per cent upon the total cost—did we not?

Mr. COTTON. Yes.

Senator JOHNSON. That is, we paid 5 or 6 per cent upon th of material that came from far away, from the institutions in these gentlemen were interested, and we paid our 5 or 6 per c well as furnished the work that was done in the yard, too?

Mr. COTTON. Oh, yes; there is no question about that.

Senator JOHNSON. So that in reality for the work that was within the yard we were really paying double that sum, were we

Mr. COTTON. May I answer that categorically, and then expl little?

Senator JOHNSON. Yes, sir.

Mr. COTTON. The answer is yes. But we do not get any real illumination from looking at the fee that way. The real way to look at that is as a fee for service as a whole, for what they brought. I mean, you do not get any where by considering the items. I do not fancy that was the way they would have ever looked at it; certainly not the way I considered it. I considered it a whale of a lot in dollars, too much to pay anybody——

Senator JOHNSON. These gentlemen who were negotiating with you for this "whale" of a figure were striving to drive the best bargain they could, were they not? They did not show a disposition to come drown from that "whale" of a figure?

Mr. COTTON. Oh, you ought to have seen the first figures.

Senator JOHNSON. I suppose that is true. You drove them down?

Mr. COTTON. I would not say I drove anybody down that was getting as much money as that. But they certainly reduced their figure very much.

Senator VARDAMAN. There is no very great sacrifice?

Senator JONES. What was their first figure?

Mr. COTTON. Ten per cent, the usual contract rate.

Senator NELSON. And that included the building of the yard as well as the building of the ships?

Mr. COTTON. That was never discussed. It was 10 per cent on the job. That is the usual way they do business.

The CHAIRMAN. They do not get any part of the cost of the yard under the contract now.

Senator NELSON. Oh, yes; they get 5 per cent.

The CHAIRMAN. Not on the cost of the yard.

Mr. COTTON. As a matter of fact, Senator Fletcher, if you analyze it that way, that is the very place where they ought to get it, because the skill employed in laying out that yard is more important than any other single factor in this thing. That is, this job depends more on that than on anything else.

The CHAIRMAN. If you add a percentage on the cost of the yard you would see where they would be advantaged by wasting all this money, if it is being wasted there, because it is a little difficult to see that, inasmuch as they do not get any percentage on that cost.

Senator NELSON. I thought they did.

Senator JOHNSON. The chairman is correct. They got 6 per cent rental on the $1,700,000 and some odd that they put up for their option, but they did not get a percentage upon the cost of the yard. The percentage is upon the total cost of the fabricated ships.

The CHAIRMAN. That is correct.

Mr. COTTON. I have never read the final contract, but that was the way I left it.

Senator JOHNSON. Do you recall the 6 per cent upon the option price that was to be paid?

Mr. COTTON. Something like that; I do not know what it was.

Senator JOHNSON. Does not that recall to you something concerning the title to the land and other options and who held them?

Mr. COTTON. No; you have emptied my mind on that. In fact, I would never have known. I had plenty on then, and I certainly was not looking for those things.

Senator NELSON. Now, the company put in no money toward the building of the plant and no money toward the building of the ships or getting the material?

Mr. COTTON. That is distinguishing between the contract as I le it and the one that was made. So far as I know, the amount money which the company put in, if they put any in, was limited to sum that is comparatively nothing in regard to the main items pl the services of their 100 or so experts.

Senator NELSON. They are put on the pay roll, and we pay f them.

Mr. COTTON. They were not in the July contract; I do not kno what the final contract is.

Senator NELSON. We do now. The contract was made the 13th (September. We pay all except for the president and for the bool keepers, etc. But they do not need any bookkeepers, because all th money is advanced by the Government; it is only the Governmer that needs bookkeepers. Now, what did they put into this for th percentage they got? What does the company put in for which the get this 5 per cent or 3 per cent?

Mr. COTTON. You are asking me about a contract I have never rea You mean, what has the Government bought with that money?

Senator NELSON. Yes; what do we get for our money? They ha no good will——

Mr. COTTON. May I tell you? You have got a better bet for ge ing the job done, for getting that particular job done, than you woul have gotten anywhere else that I know of.

Senator JOHNSON. A better what?

Mr. COTTON. A better bet than you would have gotten anywhe else.

Senator JOHNSON. But the bet has gone wrong.

Mr. COTTON. I do not mean to be flippant in that. You are loo ing at it from the point of view of who pays the bookkeeper. Th if you will pardon me, is not the right point of view. Those m brought something in, really.

Senator NELSON. What did they bring? They brought their for and we pay it, and the list here shows we are paying them more th they had agreed to pay them.

Mr. COTTON. You can not get me to differ with you about h much money we ought to pay them; but they brought somethin really. They brought a combination of real shipbuilding abili in the New York Shipbuilding Co.—executive ability to handle a j of that size and engineering ability. It was real. How much y ought to pay them for that I am not discussing; but you say th brought nothing: they brought a lot.

Senator JOHNSON. Pardon me. This is what they agreed to bri Paragraph II of the contract reads:

Organization.—The agent will as expeditiously as possible organize a fo of workmen, superintendents, and the administration necessary to carry to completion the building of the vessels herein contracted for.

That is what they agreed to bring, is it not?

Mr. COTTON. That was not in the contract when I knew anythi about it. Those three concerns had in themselves those organi tions, which under the July contract they were to furnish, I thi free; but whether the salaries were to be paid is not important. do not mean to differ with you or to fence with you, but there w some reason for getting them.

The CHAIRMAN. The New York Shipbuilding Co. has its own yard?

Mr. COTTON. Oh, yes.

The CHAIRMAN. They have their own force employed in the yard there. I take it?

Mr. COTTON. I did not mean they transferred their ordinary working force; I mean their executive force. I have no idea how this contract has gone.

The CHAIRMAN. Could not the Government, Mr. Cotton, have gone on and undertaken this proposition?

Mr. COTTON. Hog Island? No; it could not have done it, Senator Fletcher. When I saw the actual operation I felt confident we could not.

Senator NELSON. You overlook the fact that we had a $40,000 ship architect in the commission—$30,000 and some extras, making about $40,000 a year. Do you mean to say the Government was not fit to go on and do that?

Mr. COTTON. In the first place, do not say I overlook it, because I neither overlooked it nor knew it. I do say this: That there was no man in the Fleet Corporation who could begin to handle that contract.

The CHAIRMAN. Could we not have gone out and got them just as we are now paying these men? We could undoubtedly have employed a good many of these same men, just as the International has done.

Mr. COTTON. Do you ask my opinion on that? My opinion is very firm that the Government could not have done that. You know how long it has taken to build the Fleet Corporation now into an organization. You would have wasted six months if the Government had started. If there had not been an element of time in this thing, nobody would have thought of doing it this way.

Senator NELSON. Do you not know that Admiral Bowles has had to go up there recently and has found that the work has not been moving as rapidly and efficiently as it should, and the Government has come to the conclusion that they have got to have Admiral Bowles up there to look after it?

Mr. COTTON. May I state again. I left the [illegible] Gen. Goethals went out. I do not know what [illegible] I only know these negotiations as I left them, and I was informed by Mr. Hurley that substantially the same plans had been carried out.

The CHAIRMAN. In reference to what has gone on, we have a report here from Mr. Piez, the general manager, [illegible] and Mr. Hurley, joined in by others, and we have [illegible] communications, all showing that there has been [illegible] and the question arises: From your experience in the office and [illegible] there, who is responsible for that? [illegible] district officer as the man to see [illegible] to be held responsible?

Mr. COTTON. Who ought to be held responsible in that? Under an agency contract where the Fleet Corporation has complete control of the work of the agent, if the agent [illegible] the work and is not promptly fired, the man who is in charge of the Fleet Corporation is responsible. That is what an agency contract means. If [illegible] culties are such that they would not [illegible] firing

why they are all right. You have got to expect in an operation of that magnitude, where your real aim is haste, a great deal that would seem in ordinary commercial operation to be waste. The fault? I know nothing about the fault in the matter. I am simply utterly unfamiliar with it. But that is true in any agency contract, that the fellow who is having the work done either ought to fire the agent or keep the agent to his job.

The CHAIRMAN. Well, the Emergency Fleet Corporation would keep posted through its representatives there, the inspectors and the district officer, would they not?

Mr. COTTON. You embarrass me by asking me something where I do not know the facts. You see, my acquaintance ended with them.

The CHAIRMAN. I thought you knew their plan was to establish what they call district officers——

Mr. COTTON. Yes. No; it could not be the district officer. The district officer is a naval architect. He would be out of his sphere, and he has a thousand things to do.

The CHAIRMAN. He had nothing to do with seeing whether the work was going on in that yard or not?

Mr. COTTON. I should say not; and if it was intrusted to a district officer, it was incomparably silly.

The CHAIRMAN. Then it would be the inspectors whom the Fleet Corporation sent there to see that the work was going on.

Senator NELSON. They have one or more inspectors in the local yards, Mr. Chairman.

Mr. COTTON. I assume that it would be a first-class engineer sent there to boss the job.

Senator NELSON. Is not that a violent assumption?

Mr. COTTON. Well, you are in a better position to know than I am, sir.

The CHAIRMAN. Do you recall when these negotiations began?

Mr. COTTON. The lining up of the fabricating capacity began, I should say, toward the end of May. The financial negotiations, which I participated in, must have started about the 25th of June, and lasted about 10 days, I should think: not longer.

The CHAIRMAN. Can you account for the delay from May to September before the contract was actually made?

Mr. COTTON. I know, for instance, that the conception of building a ship by labor that was not marine labor was in May. Those men came down and it took them a month to line up that trade, to get designs that the experts would pass I regard that as quick work. The financial contracts, as drafted by the force that was then there, took about 10 days.

The CHAIRMAN. Of course, we are all agreed that time is very important, and everybody wanted to go ahead as fast as possible. We are willing to throw away money to save time, but if that was true, it looks like there might have been some time saved between May and September in actually closing this contract.

Mr. COTTON. You can understand why I do not want to comment on that, I think.

The CHAIRMAN. Were these negotiations the beginning of the fabricated-ship idea and plan?

Mr. COTTON. As applied to this situation, yes; nobody had thought of it. You see, when you start to look into this thing, if you take

the yards that now exist, they could not produce more than 1,500,000 tons of shipping. The commandeering program could hasten that, provided it were promptly started, by standardization of type. But altogether there would not be enough. But the looming factor—you could see it even then—was labor: and the great thing was to get a ship that could be built without marine labor. That was the whole problem, and this was the attempt to solve it.

The CHAIRMAN. Did it occur to you that it might not be wise to establish these three agencies, these great yards, close together in this way?

Mr. COTTON. Let me say this, that able as Mr. Powell is and competent as he is in all shipping matters, he gave an opinion there with a great deal of confidence on a subject in which there is considerable doubt and a pretty good bet on the other side. The original plan outlined was not to establish three yards, but to establish two, two great big ones, and to have them near industrial centers. There was a real reason for that. In the first place, with Mr. Willard, there had been laid out railroad plans to run the steel straight to those two points. You could not diffuse the operation. You could not get labor and keep it scattered in a number of industrial points. You have got to go to a big center, and if you will turn back to July you will not find a place on the Atlantic seaboard with better labor markets than those two.

I do not mean to say that I had the decision on those plans, but I should say that decision was probably right, to start two big manufacturing plants—not shipbuilding plants, mind you—near industrial centers, near tidewater, where freight shipments could go expeditiously, with tracks laid out, and—very important—immediate facilities for unloading cars without delay, a tremendously important point. And I think Mr. Powell, able as he is, was pretty unfair to the argument on the other side.

Senator NELSON. But there was no railroad connection between Philadelphia and the Hog Island yard.

Mr. COTTON. But it was easy to get that. The layout of this yard called for over 100 miles of railroad right at it.

Senator NELSON. There was no railroad connection with the proposed yard?

Mr. COTTON. No; but it was perfectly easy to get it.

Senator NELSON. Were you ever at Hog Island yourself?

Mr. COTTON. No. Why should I be? My judgment on it would not have been any good; not a bit of good.

Senator JONES. In that connection, Mr. Cotton, who passed on the business phases of this contract?

Mr. COTTON. The contract was not made until two months——

Senator JONES. So far as the Emergency Fleet Corporation or the Shipping Board was concerned?

Mr. COTTON. It had been talked over in the Shipping Board or had been thought over by Gen. Goethals and all the men who were there advising him—Maj. Wood, Mr. Fuller——

Senator JONES. Did you ever have a conference with the man representing the Government as to the best features of the contract?

Mr. COTTON. Oh, it was considered in conference in the Fleet Corporation and the Shipping Board; very fully in the organization of the Fleet Corporation. I know it was considered in the Shipping

Board, but when they had a conference of the Shipping Board I was very rarely there. I can not recall that I was ever there when this was considered. I mean to say I did not see much of them.

I do not want to be misunderstood on that. There is a good deal to be said for that thing of massing the two plants, and I say again I think that was a wise decision. The separated yards, 10-ship units—that is the kind of yard like Newport News. That is the handwork plan. Of course this meant a colossal operation. I have no knowledge whether it has failed or will fail or what its troubles are; but as a means of solving that difficulty I believe that original decision was right, and it has been carried out in the same way by everybody since. Mind you, it is either the fabricated ship or no increase over your other ship.

Senator NELSON. Are those other two yards, the Submarine and the Merchants, fabricating ships, too?

Mr. COTTON. I have no knowledge as to what contract was given the Merchants, but I have no doubt both of them are fabricating. The Submarine Boat was intended to be a fabricating yard. People get misled by a catchword like that. It is one of the terms that the war always brings; it does not quite describe the type. It is a little unfair to the project to put a man to explain it who is merely a legal and business-negotiating person.

Senator JONES. That is the reason I asked the question I did a moment ago. I thought you had more to do with the legal phases of it than otherwise. That is why I asked you a while ago to find out who looked at it from the business standpoint.

Mr. COTTON. The whole staff of the Fleet Corporation looked at it, and they were a good lot. There are none of them there now, but they were a good lot, just the same.

Senator JONES. Was there not somebody who specially passed on those phases of it?

Mr. COTTON. Surely.

Senator JONES. Who was it?

Mr. COTTON. Gen. Goethals. And mind you, right after him, Admiral Capps, Mr. Hurley—every man who has been connected with it has had a chance to crawfish.

Senator HARDING. Mr. Cotton, will you help me out of a hole? You said just now that "They were a good lot, and they are not there now." What is the inference?

Mr. COTTON. He asked me who they were. Practically all of them have gone to France; when they lost these jobs they went to France. Maj. Woods, who was a very strong fellow, is a lieutenant colonel in France. A fellow that passed on most of the contracts is in Italy. They are all gone.

Senator HARDING. You just mystified me a little.

Mr. COTTON. I did not mean to. Admiral Rousseau was there, and he has gone back to the Navy.

I did not want you to go away with the idea that the fabricated-ship project was a bad bet; it was a good one. The worst it can pan out is loss of money and loss of time on the engineering plans. I do not deny those are bad.

Senator VARDAMAN. Nobody cares so much about losing money. It seems that all that is particularly desired is an opportunity to

end it. I have listened with a great deal of interest to your testi-
ony. It seems that these men who promoted this project before
e Government took hold of it were quite as keen to make the money
it of the emergency as they were in time of peace, and I am sur-
ised, because I thought those gentlemen whose names were put
the record had a corner on almost all the patriotism in the country.

Mr. COTTON. Now, I do not believe—may I speak to that text?

Senator VARDAMAN. Yes.

Mr. COTTON. I do not believe your opinion and mine as to those
en differs very much, and I do not believe that their patriotism
r their morality differs very much from that of a good many others.

Senator VARDAMAN. They are just ordinary mortals?

Mr. COTTON. Merely ordinary mortals. They were risking a good
leal—not in cash, but I mean they were attempting the most diffi-
cult of operations that I have seen for a long while, at a time when
they could have gotten Government contracts on perfectly safe,
steady-going work where they could not lose—where they could not
lose their reputation; where they could not lose money.

Senator VARDAMAN. Really, Mr. Cotton, have they made any con-
tracts by which they can possibly lose?

Mr. COTTON. In this?

Senator VARDAMAN. Yes.

Mr. COTTON. So far as I know, they have not. But I have got
one thing to say there: They would have been crazy if they had put
their own money into this project. Any man who would put his
own money into a project like Hog Island or Submarine Boat ought
not to have that contract. It was just a gamble——

Senator VARDAMAN. It is not a question of gambling: it is a ques-
tion of saving the country.

Mr. COTTON. If you put your own money into that project, nobody
could tell what that contract meant——

Senator VARDAMAN. But they could tell the purpose of that, cer-
tainly, and the purpose was to save the Republic in this desperate
war.

Mr. COTTON. Personally I do not differ with you a bit, but you
fail to understand me in one thing. No matter what a contractor
had done on these projects, if he did not get right from the start
efficient Government help, the best inspection, help with the rail
roads, help with the steel, help with the labor—everything he did
not stand a chance of success.

Senator VARDAMAN. But if the Government guaranteed him
against loss, don't you think that ought to be about as much as any
man ought to ask for in times of stress like this?

Mr. COTTON. My opinion is that in these times of stress no man
ought to ask anything for himself.

Senator VARDAMAN. Well, as a matter of fact, they are asking a
great deal for themselves, are they not?

Mr. COTTON. They are asking the market rate, in my
understanding.

Senator VARDAMAN. A rate that is probably as high or higher than
in normal times.

Mr. COTTON. No; a good deal lower than in normal times.

Senator NELSON. Is not a 6 per cent rate on that one
here a high rate?

Mr. COTTON. No; that is a low rate.

Senator NELSON. Is that the New York rate?

Mr. COTTON. No; that is a low rent in any part of the country.

Senator NELSON. On an inflated price?

Mr. COTTON. Now, I know nothing about that. Provided the value is right it is a low rate. If the value was wrong, it may be crooked or anything else.

The CHAIRMAN. Does the Government come out any better on this sort of contract than they would under the lump-sum price?

Mr. COTTON. Would they?

The CHAIRMAN. Yes.

Mr. COTTON. The lump-sum price would not pay on a venture like this. Fifty or sixty millions would have been nothing in this proposition.

The CHAIRMAN. They submitted proposals to build these ships at so much?

Mr. COTTON. Yes; they said they would provided you took the risk, that material did not go up, that labor did not go up, and that they were able to produce the ships at so great a factor of labor efficiency. They did not offer a lump-sum contract that anybody could take.

The CHAIRMAN. I understood they came to you with a figure to build these ships at so much apiece?

Mr. COTTON. And the price was so high—even then they would not take the risk. And, as I say, I do not blame them; they could not have done it.

The CHAIRMAN. It was not an unconditional offer?

Mr. COTTON. No; it was not. You could not have expected it.

Senator JOHNSON. Because of the magnitude of the scheme?

Mr. COTTON. The magnitude and the fact that it did not depend on their efforts whether it went through or not. I mean no man by his own force could possible have put through that scheme unless he had had every backing, everywhere and all the time.

Senator JOHNSON. You could say that of all large shipbuilding operations, could you not?

Mr. COTTON. I could, but it would not be as measurably true as of this one.

Senator JOHNSON. Because of the fabricated ships?

Mr. COTTON. And because of the fact you are dealing with an engineering problem you do not know anything about. Because you have to train all your labor. Because you have got to create an industry.

Senator VARDAMAN. I am asking for information, because I do not know about this. You say the fabricated ship is not a very neat or symmetrical structure, but it will go?

Mr. COTTON. I said they said it would go.

Senator VARDAMAN. Have any of them been constructed? Is there any possibility of that awkward construction interfering with the operation of the ship?

Mr. COTTON. My opinion would not be of any value in that.

Senator VARDAMAN. I mean, what is the consensus of opinion among shipbuilders whom you have heard discuss it?

Mr. COTTON. A lot of them talk of the way Mr. Powell did. They expect this one to sink——

Senator JONES. To sink?

Mr. COTTON. Well, I should say, they do not know whether it will or not.

Senator VARDAMAN. Have any of those ships been constructed yet?

Mr. COTTON. I have never heard of a ship that was altogether of is type.

Senator VARDAMAN. A great many of them, I suppose, are in urse of construction?

Mr. COTTON. I have not been around here, and I really do not now about that.

Senator HARDING. Do you refer, Senator, to the fabricated ships?

Senator VARDAMAN. Yes.

Senator HARDING. There have been some keels laid.

Senator VARDAMAN. Have any of them been built?

Senator Harding. None afloat.

Mr. COTTON. Remember, we are talking about the capacity of hese fellows; for instance, the Submarine Boat had just completed his chaser contract when they came in. They had been launching a ship a day for some time at their plants. They had efficiency. I mean, they brought something: there is no question about that.

The CHAIRMAN. How about the Merchants?

Mr. COTTON. I would rather not discuss the Merchants, sir. I never proposed a contract with them. They did not have the organization of the other two.

Senator HARDING. We have got a pretty favorable report on the progress of the Merchants' plant.

The CHAIRMAN. Were they building any ships?

Mr. COTTON. The Merchants? Mr. Harriman had obtained in some form an interest in the Chester yards, and the Chester yards had been building ships—an experiment on this pattern of Jack's.

Senator JOHNSON. Who is Mr. Harriman?

Mr. COTTON. I knew him as a coach on a crew, but he had a very well-known father, Mr. E. H. Harriman.

Senator JOHNSON. He is a representative of the Harriman interests in New York?

Mr. COTTON. I do not know whether he is a representative or what he does.

Senator JOHNSON. A son of E. H. Harriman?

Mr. COTTON. I understood so. He was then building an organization; he was not like the others that had it. He may have a very effective one: I simply do not know. He seemed to be a very live fellow.

Senator NELSON. Here is Mr. Piez's report.

The second Government yard for the construction of the wood or fabricated ships is located at Bristol, Pa. The Harriman [illegible] in the yard in this case, and a contract was entered into [illegible] the same way as in the case of the American-International Corporation.

Do you know anything about that?

Mr. COTTON. Not the least, except what Mr. Piez says. I never saw the yard and do not know anything about it.

Senator NELSON. Do you know anything about the Hog Island or the Clinchfield contract?

Mr. COTTON. No: that was one of those early contracts.

Mr. COTTON. Yes; I am still drawing an annual salary.

Senator JONES. What is it?

Mr. COTTON. I think it is $2,500?

Senator NELSON. Are you in the Government service now?

Mr. COTTON. Oh, yes. I am helping Mr. Hoover right now.

Senator NELSON. Are you with Mr. Hoover?

Mr. COTTON. Yes; right now, trying to get into more trouble apparently. The Federal reserve work is not a work that takes all my time.

Senator JONES. Did you look after these Alaska matters at $2,500 a year?

Mr. COTTON. Oh, yes. I was up in Alaska all the summer before this. A year ago I spent all summer there and I have had other work there.

You understand, I have run a law office in New York, coming down here as I was needed.

Senator JONES. As I understand, you have been for several years getting $2,500 a year salary? Is that correct?

Mr. COTTON. Yes; I think so.

Senator JONES. What were your duties? What were you expected to do for that $2,500?

Mr. COTTON. I am expected to advise the Federal Reserve Board on all law matters about which I am asked. That has not taken all my time.

Senator HARDING. Mr. Cotton, you were asked about the Sloan contract. If I show you this contract, would it refresh your mind?

Mr. COTTON (after examining contract). It seems to be in the regular form. No; I do not get any reaction from it.

The CHAIRMAN. Is there anything else you wish to suggest, Mr. Cotton?

Mr. COTTON. No; I have no suggestions to make at all.

The CHAIRMAN. I believe that is all, then, Mr. Cotton. We are very much obliged to you, sir.

Mr. RANSDELL. Mr. Chairman, I would like to have Mr. Ernest Lee Jahncke, of New Orleans, take the stand.

STATEMENT OF MR. ERNEST LEE JAHNCKE, SHIPBUILDER, NEW ORLEANS, LA.

Senator RANSDELL. Mr. Jahncke, will you please state your full name and place of residence?

Mr. JAHNCKE. Ernest Lee Jahncke, New Orleans, La.

Senator RANSDELL. Are you a native of Louisiana?

Mr. JAHNCKE. Yes, sir.

Senator RANSDELL. Lived there all your life?

Mr. JAHNCKE. Yes, sir.

Senator RANSDELL. Are you engaged in shipbuilding, Mr. Jahncke?

Mr. JAHNCKE. We have been in the navigation business in New Orleans and have been in the wooden-ship building business, building schooners, for a good number of years before the war.

Senator RANSDELL. So you were in the shipbuilding business when the war broke out?

Mr. JAHNCKE. Yes, sir.

Senator RANSDELL. Have you any contract for wooden ships with the Government?

Mr. JAHNCKE. Yes, sir.

Senator RANSDELL. You have a contract, also, with the Government, I believe, for some steel ships, have you not, Mr. Jahncke?

Mr. JAHNCKE. Yes, sir; six plus six 5,000-ton steel vessels.

Senator RANSDELL. You would like to read a statement in connection with the matters you wish to bring before us?

Mr. JAHNCKE. Yes, sir.

The CHAIRMAN. Mr. Jahncke, you have seen the statements made by Admiral Bowles and others in connection with your contract?

Mr. JAHNCKE. Yes, sir; that is what I would like to reply to [reading]:

JAHNCKE SHIPBUILDING CO. (INC.),
New Orleans, February 2, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman, and Members Committee of Commerce,
United States Senate, Washington, D. C.

GENTLEMEN: I wish to respectfully refer to the correspondence received by you from Admiral F. T. Bowles, of the Emergency Fleet Corporation, in reference to detailed plans on account of our ship contract No. 93 S. C.

After remaining in Washington for over seven weeks, I finally succeeded, on October 18, 1917, in being awarded a contract for six plus six 5,000-ton steel vessels.

Senator JONES. Mr. Jahncke, you state you had been here for six weeks before you got a contract?

Mr. JAHNCKE. Worse than that, seven weeks—nearly two months.

Senator JONES. What seemed to be the trouble; what was the cause of your delay?

Mr. JAHNCKE. A whole lot of trouble.

Senator JONES. Do you state that in your statement?

Mr. JAHNCKE. No, sir.

Senator JONES. If you do not, I would like to know.

Senator RANSDELL. I would suggest that he read his statement, and then that we ask him questions, or, if you prefer, he can answer the questions now.

Senator JONES. Some few things might slip my mind. I thought he could state briefly what the cause of that delay was.

Senator RANSDELL. There are no objections to that at all.

Mr. JAHNCKE. I sent a telegram to Capt. Snow, who was executive aide to Admiral Capps at that time, and I came up here from New Orleans to bid on composite ships, and they would not consider my bid, and I was determined that I wanted to get some type of ships, and so I stayed and submitted another proposition. They would not consider that. I finally submitted a third proposition, and they would not consider that: and then I tried to get plans to figure on these steel ships.

Senator JONES. Were all your propositions on composite ships?

Mr. JAHNCKE. The first two were.

Senator JONES. What reason did they give for not considering it?

Mr. JAHNCKE. They said that the policy of the corporation—I did not know it at the time—was not to build any more wooden vessels.

Senator JONES. No more wooden vessels?

Mr. JAHNCKE. Composite vessels.

Senator RANSDELL. You had been building wooden vessels, I believe, for one of the foreign governments when the war broke out, I believe?

Mr. JAHNCKE. Well, for the Central American trade, small vessels.

Senator HARDING. This delay you experienced in finally closing up your contract was on what you call the fabricated steel ship, or the standard steel ship?

Mr. JAHNCKE. Well, it is the ships which has evolved out of this, through my engineer and Mr. Ferris's representative in New York, and it is more of a return to the standard design; in other words, it is a compromise between the fabricated ship and a turning back to the standard ship construction.

Senator RANSDELL. You finally got a contract for six steel ships, I believe?

Mr. JAHNCKE. Six, plus.

Senator RANSDELL. Contract for six, with an option on six?

Mr. JAHNCKE. Yes, sir.

Senator JONES. Then, as I understand, the reason for this delay was because you were submitting proposals upon ships they did not propose to build; is that correct?

Mr. JAHNCKE. That is correct, regarding the first three or four days only; the balance of the time I was waiting on the decision for the steel ships.

Senator JONES. What decision were you waiting on?

Mr. JAHNCKE. Well, I presume they were investigating standing and my responsibility, and matters of that kind.

Senator JONES. That is, you had submitted a proposal to build standard steel ships?

Mr. JAHNCKE. Five-thousand-ton steel vessels.

Senator JONES. And they delayed acting on that for four or five weeks?

Mr. JAHNCKE. Yes, sir; a month and a half.

The CHAIRMAN. In connection with your furnishing designs, was it not—were you to furnish the designs?

Mr. JAHNCKE. No, sir; not at that time.

Senator RANSDELL. The first delay you speak of was before the contract was made, was it not?

Mr. JAHNCKE. Yes; this was before we received the contract.

Senator RANSDELL. And then there was considerable delay after the contract was signed, before you got the plans, which you will explain to us?

Mr. JAHNCKE. Yes, sir.

Senator NELSON. He will explain that in his statement. I think we had better go on with the statement.

Senator JONES. Was there any reason given for this month and a half delay before you got contracts, in which you were to furnish designs? I want to see who is to blame, whether you were to blame or whether it is the Emergency Fleet Corporation.

Mr. JAHNCKE. Senator Jones, that is a different matter. It has nothing to do with the contention before the committee, but I would be glad to explain to you.

Senator JONES. That is the very thing which is before the committee.

Mr. JAHNCKE. As I understood at that time, they insisted upon building nothing but a 9,000-ton ship. I do not want to say "insist"—I would like to have that changed. What I meant to say was, it was the policy of the Fleet Corporation to build 9,000-ton vessels, and I did not want to build 9,000-ton vessels, because my shipyard is located in such a place that I can float to sea a 5,000-ton vessel, and they had awarded a contract to the Submarine Boat Corporation for 50 of such boats, and I did not see why I should not be entitled to the same consideration. So I asked for the midship section of a 5,000-ton vessel.

Senator NELSON. And they stood you off on that five or six weeks?

Mr. JAHNCKE. They did; yes, sir.

Senator NELSON. And what excuse did they give?

Mr. JAHNCKE. I finally got the midship section from some of the officers over there, and then submitted a bid, which was turned down.

Senator VARDAMAN. Did they explain to you why they would not act on it immediately, when you wanted to build ships?

Mr. JAHNCKE. Just as I said, it was the policy of the corporation to build 9,000-ton ships and not 5,000-ton ships.

Senator VARDAMAN. That was the reason they gave?

Mr. JAHNCKE. Yes, sir.

Senator NELSON. They had already let the contract for 5,000-ton ships to the Submarine Boat Corporation, for 50 vessels?

Mr. JAHNCKE. Yes, sir; and a month after my contract was awarded. I understand that they awarded another contract to the Submarine Corporation for a hundred 5,000-ton ships.

Senator RANSDELL. The reason you could not build a larger ship, I believe you stated here, was because there was not sufficient water from your shipyard out to deep water of the Gulf?

Mr. JAHNCKE. Yes, sir; that is right.

Senator RANSDELL. You have only 14 feet as a matter of fact, between your shipbuilding plant and the Gulf?

Mr. JAHNCKE. Yes, sir.

When the contract was [illegible] to me for signature I called Mr. [illegible] which stipulated that the [illegible] was not in accordance with my [illegible] had assured me that I would [illegible] marine Boat Corporation.

I asked Mr. [illegible] have my statement verified and [illegible]

I returned the next day [illegible] drawn up and that there [illegible] agents; and after having a [illegible] who also gave me the same [illegible]

The following [illegible] tion of the [illegible] marine Boat Corporation [illegible]

I was very [illegible] whatever to [illegible] sion, explained the [illegible] legal, the [illegible] any headway, although I [illegible] utmost to secure the plans.

On October 30 I wrote [illegible] Admiral Bowles, advising him [illegible] detail plans from the corporation [illegible] received assurance from the [illegible] nished us.

On the following day I secured from Admiral Bowles (Exhibits B and C) two letters, one advising me to take this matter up with the Submarine Boat Corporation, New York City, and the other inclosing a letter addressed to Mr. D. H. Cox (Exhibit D), their representative in New York, advising that there would be no objection to the Jahncke Shipbuilding Co. making their arrangements direct with the Submarine Boat Corporation for these plans. Having secured this authority I made an appointment with Messrs. Worthem and Sutphen, of the Submarine Boat Co., the following day in the Willard Hotel, Washington, D. C.

After showing these gentlemen the letters from Admiral Bowles, they both assured me of their cooperation, and we made an agreement whereby the Jahncke Shipbuilding Co. would be furnished with all the detail shop drawings of the ships on a basis of our paying the proper proportion of the cost of preparing these details in the ratio of the number of ships which they had under contract and those which we were to build.

They further stated that they would only be too glad to have us come to their shipbuilding plant, and they would instruct their superintendent to give our men any information or knowledge which we desired.

This matter having been satisfactorily settled, although at an expense of 10 days' delay, I left for New Orleans.

On November 7 my engineer, Mr. Guerin, made arrangements to leave for New York, and I gave to him the inclosed letters of introduction to Messrs. Sutphen (Exhibit E) and Ferris (Exhibit F).

On November 14 I received the inclosed wire (Exhibit G) from Mr. Guerin, which I am herewith attaching, and to which I replied as per attached telegram of November 15, 1917 (Exhibit H).

Senator NELSON. When you had the conference with Mr. Sutphen, was Ferris present?

Mr. JAHNCKE. Oh, no, sir; that did not come until away later.

I am inclosing herewith copy of Admiral Bowles's letter to the Submarine Boat Corporation (Exhibit I), dated November 16, 1917, ordering said Submarine Boat Corporation to furnish us with the detail plans, which said letter was presented to Mr. Guerin, as mentioned in his statement.

Mr. Guerin, after two weeks, returned to New Orleans and advised me that, although he had made tentative arrangements with Mr. Ferris's representative in New York, on his way south he stopped in Washington and explained this matter to Mr. D. H. Cox, Admiral Bowles's assistant, in a final effort to see if it was not possible to get the plans from the Submarine Boat Corporation. Mr. Cox advised that he would make a final attempt and would wire us at New Orleans to that effect. After waiting until Wednesday of the following week we wired Admiral Bowles as per inclosed telegram (Exhibit J), dated November 27, advising that we could not wait any longer and had made other arrangements for plans.

On November 28 we received a telegram (Exhibit K) from Admiral Bowles as per copy attached. On November 30 we wired Admiral Bowles as per copy attached (Exhibit L) and also wrote him a letter, which is already a part of this record. On December 5 we received from Admiral Bowles the attached reply to our telegram and letter of November 30.

On December 13 I called to see Admiral Bowles, at which interview I advised him that my engineer had made a tentative arrangement with Mr. Ferris's representative in his New York office to the effect that we were to pay $20,000 for a complete set of all necessary plans.

Admiral Bowles advised me that this matter could not be handled in this way, and immediately instructed Mr. Ferris to keep a record of the cost of the preparation of these plans, and that the corporation would bill the Jahncke Shipbuilding Co. direct for this work.

I replied that this was immaterial to us as long as we received the plans, and that if he decided that this was the best procedure it was entirely agreeable to us.

I thought I had explained very clearly in that interview that there was absolutely no desire on my part or the Jahncke Shipbuilding Co. to save any money by this transaction; in fact, I stated that it was most unfair to be compelled to go to an outside architect when it was agreed that the corporation would furnish us these plans, and that this whole matter was brought about by his failure to secure them.

This interview resulted in Admiral Bowles making very uncomplimentary marks about Mr. Ferris and myself. I endeavored to reply, but as I was in is office and as he did most of the talking I could not interrupt him without ing discourteous.

I had never been placed in a position of this kind before, and as I was not amiliar with the detail of the arrangement which my engineer had made ith Mr. Ferris's representative in New York I immediately wired Mr. Guerin o come to Washington.

The record will show that Mr. Guerin came up and presented himself at Admiral Bowles's office and submitted a statement of the entire transaction, which was done voluntarily and to show our good faith.

I take particular exception to Admiral Bowles's statement dated January 19, in which he says that "the facts of the matter do not permit me to place confidence in this statement, although it may have been true as far as it concerns Jahncke himself."

Admiral Bowles has placed an entirely different and wrong construction on our relation to Mr. Ferris and has openly intimated that they were made for ulterior purposes. As this is not in accordance with any of the facts, and as there is no vestige of truth in it, I wish to deny it emphatically.

In the same statement Admiral Bowles remarks that Jahncke had written that "he does not want the plans from the Submarine Boat Corporation." This is also not a fact, and no one knows better than Admiral Bowles how very insistent we were and how for nearly two months we had been trying to get these details, and he had absolutely no right to make such a statement to you, unless it was qualified, giving the real facts in the case.

I wish you to know that our contract with the Emergency Fleet Corporation calls for a stipulated time for delivery, and a penalty of $300 per day is imposed for every day each ship is not delivered on contract time.

From our contract also has been eliminated all labor-protection clauses, and the agreement is a strictly business contract without paternalistic clauses.

As president of the Jahncke Shipbuilding Corporation, having signed such a contract, it certainly was my duty to see that the work was started immediately and that it should not be stopped for one moment, if it was humanly possible to keep it going.

Senator NELSON. May I interrupt you there, Mr. Jahncke? You speak of the penalty for any delay of delivery. Do you get a premium for earlier delivery?

Mr. JAHNCKE. Yes, sir.

Senator NELSON. What premium do you get?

Mr. JAHNCKE. The same.

Senator NELSON. $300 for every day in advance of delivery?

Mr. JAHNCKE. Yes, sir.

Senator NELSON. Thank you, sir.

Mr. JAHNCKE. But I explained to Admiral Bowles that I was not a bit interested in the bonus; all I was working for was to avoid the penalty.

Senator NELSON. How much were you being paid for each ship, Mr. Jahncke?

Mr. JAHNCKE. $165 per ton.

Senator VARDAMAN. What did that amount to?

Mr. JAHNCKE. $825,000 per ship.

Senator VARDAMAN. So that $25,000 you had to pay for the plans to Mr. Ferris is just that much out of your profit, is it not?

Mr. JAHNCKE. Absolutely, sir.

Senator VARDAMAN. Did they go to him?

Mr. JAHNCKE. To Mr. Ferris?

Senator VARDAMAN. Yes.

Mr. JAHNCKE. It went to Mr. Ferris's representative, Mr. Guerin. Mr. Guerin will explain that. I had nothing to do with that at the time.

Senator RANSDELL. Right on that line, were you not to pay th expense of the plans, whether furnished you by the Shipping Boar as you claim, or by an outside party, they were to come out of yo were they not?

Mr. JAHNCKE. Yes, sir; I agreed to pay for those plans to th Shipping Board.

Senator VARDAMAN. Then it was just that much out of your pocket

Mr. JAHNCKE. Yes, sir; because the total cost of those plans fro the submarine company would have been less, I understand, tha this man wanted to charge.

Senator NELSON. It was on a pro rata basis?

Mr. JAHNCKE. Yes; on the number of ships they built.

Senator NELSON. On the proportion that their ships bore to you ships?

Mr. JAHNCKE. Yes, sir.

Senator JONES. With whom did you make that agreement?

Mr. JAHNCKE. I did not make that agreement. My engineer mad that agreement with Mr. Ferris's representative in New York.

Senator JONES. I do not refer to this $20,000 now. I refer to thi proposition for paying your proportionate part of these submarin corporation plans.

Mr. JAHNCKE. You see, I could not do that until I got authorit from the Fleet Corporation to do it, and when I got authority fro the Fleet Corporation, then I went to the president of the Lack wanna Steel Co., Mr. Worthem, who, as I understand, is backing th Submarine Boat Corporation, and to Mr. Sutphen, the general ma ager, and I showed them Admiral Bowles letter, and they assured m that I could have the plans, and I made that agreement with them.

Senator VARDAMAN. Do you know what those plans would ha cost you if you had gotten them from the Submarine Boat Company

Mr. JAHNCKE. They told me that their total cost up to that tim was about $38,000, and that the cost per ship to me would not ru over—that is, the cost of the plans to me for my contract would n run over $6,000 or $8,000.

Senator JONES. That is, you were to get the designs of the shi from them?

Mr. JAHNCKE. The detail and working drawings, shop drawing There are 600 sheets of that, you know.

Senator JONES. Did you know who had prepared those?

Mr. JAHNCKE. Yes; they were prepared in Mr. Ferris' office.

Senator JONES. They were prepared by Mr. Ferris?

Mr. JAHNCKE. So we understood [reading:]

In conclusion I wish to assure you that my sole and only desire in securi this contract was to build ships in New Orleans and to build them right a as quick as possible.

I felt the South was able and had the facilities to do its share in shipbui ing, and being a Southerner I felt a pride in securing a contract for vessels the Fleet Corporation, which would be built in and hail from New Orleans.

Unfortunately the local press in New Orleans has given considerable pu licity to Admiral Bowles erroneous statement, and as I value most highly t respect of my fellow citizens in the community where I was born, I can not l this insinuation stand for a moment and I hope that I have been able to co vince you men that my dealings with the Fleet Corporation have been, as intended they should be, honest and honorable.

Respectfully submitted,

ERNEST LEE JAHNCKE, *President.*

EXHIBIT A.

WASHINGTON, D. C., *October 30, 1917.*

Capt. ELLIOTT S. SNOW,
Division of Construction, Emergency Fleet Corporation, Washington, D. C.

DEAR SIR: Referring to our conversation this afternoon, we will appreciate it if you will issue proper instructions to Mr. Theodore Ferris to secure from your agent, the Submarine Boat Corporation, a set of the shop-construction detail plans for the 5,000-ton fabricated steel vessels.

Our contract price was based on securing these detail plans from the corporation, and before signing contract the writer had an agreement with your contracting manager, Mr. George S. Radford, that these plans would be furnished us.

Respectfully,

JAHNCKE SHIPBUILDING CO.

EXHIBIT B.

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, October 30, 1917.

JAHNCKE SHIPBUILDING CO.,
Mr. Ernest Lee Jahncke, President,
Ebbitt House, Washington, D. C.

GENTLEMEN: The corporation is in receipt of your letter of October 30, in which you ask that instructions be issued to the purchasing department to have the Submarine Boat Corporation order six additional steel schedules, to be consigned to the Jahncke Shipbuilding Corporation, care Virginia Bridge & Iron Co., Memphis, Tenn., in connection with your contract No. 93-SC.

You are advised that this is a matter which you should take up with and make arrangements direct with the Submarine Boat Corporation, No. 5 Nassau Street, New York City.

We are inclosing herewith copy of our letter of this date to our representative at New York on this subject.

Very truly, yours,

F. T. BOWLES,
Manager, Division of Construction.

EXHIBIT C.

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, October 30, 1917.

JAHNCKE SHIPBUILDING CO.,
Mr. Ernest Lee Jahncke, President.
Ebbitt House, Washington, D. C.

GENTLEMEN: The corporation is in receipt of your letter of October 30, in which you ask that instructions be issued to the technical department to have the Submarine Boat Corporation furnish a set of the shop construction detail plans for the 5,000-ton fabricated steel vessels.

You are advised that this is a matter which you should take up with, and make arrangements direct with the Submarine Boat Corporation, 5 Nassau Street, New York City.

We are inclosing herewith copy of our letter of this date to our representative at New York on this subject.

Very truly, yours,

A. T. BOWLES,
Manager Division of Construction.

EXHIBIT D.

(Copy.)

OCTOBER 30, 1917.

Mr. D. H. Cox, Representative,
5 Nassau Street, New York City.

DEAR SIR: There is inclosed herewith copy of letter from the Jahncke Shipbuilding Co., under date of the 30th instant; also copy of our reply thereto.

There is no objection to the Jahncke Shipbuilding Corporation making their arrangements direct with the Submarine Boat Corporation to obtain these plans.

Very truly, yours,

——— ———,
Manager Division of Construction.

EXHIBIT E.

(Copy.)

NOVEMBER 7, 1917.

Mr. H. R. SUTPHEN,
General Manager Submarine Boat Corporation,
5 Nassau Street, New York, N. Y.

DEAR MR. SUTPHEN: This will introduce to you my chief engineer, Mr. L. H. Guerin, whom I have written you about, and who, together with representatives of the Virginia Bridge & Iron Co., wish to go over the details of the arrangement which I made with your president and yourself in Washington on October 31 in reference to furnishing us detailed shop drawings and steel bills of material necessary for the construction of the 5,000-ton fabricated steel vessels we are building for the Emergency Fleet Corporation.

Yours, very truly,

JAHNCKE SHIPBUILDING CORPORATION.
By ——— ———, *President.*

EXHIBIT F.

(Copy.)

NOVEMBER 14, 1917.

Mr. THEODORE FERRIS,
30 Church Street, New York, N. Y.

DEAR SIR: We beg to advise you that we have secured authority from Admiral Bowles, shipyard construction division, Emergency Fleet Corporation to secure from the agents, the Submarine Boat Corporation, copies of all of their general and detail plans and shop details, as well as a copy of their bill of material for the steel required in the construction of these vessels.

In accordance with this authority, I had conference with Mr. Worthem, the president of the Submarine Boat Corporation, and Mr. H. R. Sutphen, general manager, as I was leaving Washington last week, to this effect, that we would agree to pay our proportion of the cost of preparing these details, which they assured us would not exceed $6,000.

Therefore, this is your authority to secure from them, and is in accordance with our agreement, that they will furnish to you, all of these details and general drawings and their material list.

We would appreciate if you will carefully check over these drawings and have them properly approved in order that we may submit them to the Emergency Fleet Corporation at Washington for the final approval of the construction division.

Yours, very truly,

JAHNCKE SHIPBUILDING CORPORATION.
By ——— ———, *President.*

EXHIBIT G.

[Telegram.]

(Copy.)

NEW YORK, *November 14, 1917.*

Commodore E. L. JAHNCKE,
814 Howard Avenue, New Orleans, La.:

Sulphen declined to give any drawings until his first unit is erected to eliminate his responsibility, and also says that only small part of plans are completed. This is final with him, and the next step must be taken in Washington or we must make our own plans. Wire me instructions at once, regardless of time. Will remain here until we settle this most important question.

L. H. GUERIN.

EXHIBIT H.

[Telegram.]

(Copy.)

NEW ORLEANS, LA., *November 15, 1917.*

L. H. GUERIN, *Hotel McAlpin:*

Suggest you see Ferris at once. Believe he will be able to adjust matters satisfactorily. If this can not be done, it will be necessary for you to see Capt. Snow in Washington.

ERNEST LEE JAHNCKE.

EXHIBIT I.

(Copy.)

WASHINGTON, D. C., *November 16, 1917.*

SUBMARINE BOAT CORPORATION,
Pine and Nassau Streets, New York City, N. Y.

GENTLEMEN: With further reference to the above subject, it is desired that without in any way interfering with the progress of your own vessels you arrange to furnish the Jahncke Shipbuilding Co. the information desired by them on terms satisfactory to you as promptly as possible, in order that the construction of the vessels under their contract shall proceed without unnecessary delay.

It is the intention of the corporation that in supplying the Jahncke Shipbuilding Co. with fabricating plans, specifications, bills of materials, etc., you do so with the direct understanding between your corporation and the Jahncke Co. that by supplying this information you in no way whatsoever assume any responsibility for its accuracy and that the Jahncke Co. will, on its own part, have to take care of any changes or departures of any kind whatsoever from your plans and specifications necessary for use in connection with their own contracts.

The corporation suggests that your arrangements with the Jahncke Co. confine itself to an agreement to supply them with copies of bills of materials already sent by you to the mills, blue prints of fabricating drawings already approved by the classification societies and by the representative of the corporation, together with similar information relating to the construction of the vessels in general and that, from time to time, as information of this character is completed and issued by you, copies of same be transmitted to the Jahncke Shipbuilding Co.

The corporation will be pleased to receive an expression of opinion from you promptly upon receipt of this letter, as it is very desirous that this matter shall be set in operation at the earliest possible date.

Very respectfully,

(Signed) F. T. BOWLES,
Manager Division of Construction.

Mr. HUNTER,
Representative Emergency Fleet Corporation.
Mr. L. H. GUERIN,
Care of New Ebbitt House, Washington, D. C.

EXHIBIT J.

[Telegram.]

(Copy.)

NEW ORLEANS, LA., *November 27, 1917.*

Admiral F. T. BOWLES,
Manager Division of Construction
Emergency Fleet Corporation,
Washington, D. C.:

In accordance with your instructions we have tried to effect arrangements with Submarine Boat Corporation for plans, but have been turned down twice by Mr. Sutphen. Have thus lost 40 days and can not wait any longer. Have just completed arrangements for new plans to be rushed to completion, working day and night.

JAHNCKE SHIPBUILDING CORPORATION.

EXHIBIT K.

[Telegram.]

(Copy.)

WASHINGTON, D. C., *November 28, 1917.*

JAHNCKE SHIPBUILDING CO.,
New Orleans, La.:

Your telegram 27. Consider you have acted contrary our arrangements. We advised Guerin Saturday, 24, corporation would arrange you secure fabricating information from Submarine Boat and would telegraph when details arranged. Matter now concluded and fabricating information will be forwarded promptly on basis already explained, compensation not to exceed $2,000 a vessel. Telegraph immediately if prefer continue new arrangement you have made or accept information from Submarine Boat.

BOWLES, *Emergency Fleet Corporation.*

EXHIBIT L.

[Telegram.]

(Copy.)

NEW ORLEANS, *November 30, 1917.*

Admiral F. T. BOWLES,
Emergency Fleet Corporation, Washington, D. C.:

Owing absence from city, at shipbuilding plant, was unable reply your wire regarding plans Submarine Boat Corporation for our use. We regret extremely the unfortunate delay which we were placed in, not being able secure these plans last 40 days through no fault of ours, and in view of terms of contract it was most important for us take quick action get definite result. We can not explain matter fully in telegram and are writing to-day full particulars. In view of fact that new plans will be considered by Lloyds much better ship than those of Submarine design we feel we are protecting interests Emergency Fleet Corporation by this procedure.

ERNEST LEE JAHNCKE.

Senator RANSDELL. Mr. Jahncke, if I understand you correctly you entered into a contract on the 18th day of October to build these ships for the Government.

Mr. JAHNCKE. Yes, sir.

Senator RANSDELL. That your contract was secured after very considerable delay. You had been here in all, you said, about seven years trying to get a contract, and prior to signing the contract you had

Senator RANSDELL. Yours carry 500 tons more than you contracted to give?

Mr. JAHNCKE. Yes, sir. There is another point I wanted to bring out, that we did not figure at all on the military requirements; they were not in the specifications which we bid on, but when it was necessary to sign the contract I was told that I would have to include the military requirements, and I asked them to give me at that time the specifications on it, but they had no specifications, because it was just simply decided to put military requirements on all merchant vessels; and so I signed the contract with the understanding that I would put those military requirements in the vessel. I understand now that those requirements will call for an expenditure of $25,000 per ship, which I did not figure on at all, and so I stand to lose to that extent.

Senator RANSDELL. Mr. Jahncke, after making these efforts to get these plans and specifications for 56 days, then, if I understand you correctly, your engineer and representative, Mr. Guerin, went to Mr. Ferris?

Mr. JAHNCKE. After Mr. Sutphen, as I understand it, refused to give us the plans, Mr. Guerin was in New York, and he did not know what to do, and so he went to see Mr. Dornin, Mr. Ferris's representative, and he wired me to that effect, and I wired him back to use his judgment, that I would be satisfied with his judgment in the matter, and he made this tentative arrangement with Mr. Ferris's representative in New York City.

Senator RANSDELL. Was there any concealment about it on your part, and did you tell Admiral Bowles all about it?

Mr. JAHNCKE. Why, absolutely.

Senator HARDING. Was there at any time any suggestion that you see Mr. Ferris's agent from anybody?

Mr. JAHNCKE. I do not quite——

Senator HARDING. Did anybody other than your own engineer suggest seeing Mr. Ferris's agent about these plans?

Mr. JAHNCKE. No, sir; not at all. But our contract calls for Ferris type of boat, that is what is in the contract—it stipulates the Ferris type, and Mr. Guerin naturally went to Mr. Ferris in New York City—that is, to his office. I think that he could clear up that situation better than I did, because he carried out the transaction.

Senator RANSDELL. After you understood that Mr. Ferris's authorized agent had agreed to give you the plans, you came up here and spoke to Admiral Bowles about the matter, treating it just as a matter of course, and he objected and said it would not do and would have to have other arrangements.

Mr. JAHNCKE. I went into his office and explained the whole matter to him. There was not any secrecy about the matter; every blue print that would be submitted had Mr. Ferris's name on it as a naval architect in New York City. I did not know what arrangement Mr. Ferris had with the Fleet Corporation, but I did not think my engineer had done wrong in making this arrangement with his representative in New York City.

Senator JONES. How long after this arrangement had been made with Ferris's representative until you came up here?

Mr. JAHNCKE. I think, about 10 days.

Senator JONES. Now, then, you understood, when you came up, that this arrangement about the plans was completed?

Mr. JOHNCKE. Yes, sir.

Senator JONES. And that these plans would be prepared by Mr. Ferris's office?

Mr. JAHNCKE. Yes, sir.

Senator JONES. And you would pay him $20,000?

Mr. JAHNCKE. Yes, sir; and I so went and told Admiral Bowles.

Senator JONES. That was 10 days after the transaction had been made by your engineer here?

Mr. JAHNCKE. Yes, sir.

Senator NELSON. Can you account for the failure of the Submarine Boat Co. to give you those plans? Do you know why they refused to do it?

Mr. JAHNCKE. No, sir; I do not. As I say in my letter, I was in New Orleans when I received that telegram from Mr. Guerin.

Senator VARDAMAN. Do you say that the application of the military requirements to merchant vessels would cost you $25,000 more than you expect to pay, and you paid about $15,000 or $18,000 more for the plans than you expected to pay?

Mr. JAHNCKE. Yes, sir.

Senator VARDAMAN. Making a difference of about $42,000 or $43,000 on the contract? Still that would leave you a pretty good margin.

Senator HARDING. You figure that wrong, Senator Vardaman. If I understand him, he pays an outright figure for the plans.

Senator VARDAMAN. He thought they would cost him about $6,000 and he paid $20,000.

Senator HARDING. That is for all the ships; he does not repeat it for each ship.

Senator VARDAMAN. There is a difference.

Senator HARDING. $170,000—$25,000 a ship for military equipment and $20,000 for plans on six ships would be $170,000.

Senator VARDAMAN. That much for each ship. I thought they were all built after one plan.

Mr. JAHNCKE. Yes, sir; but the Senator is talking about the military requirements.

Senator VARDAMAN. But you do not have to pay him $20,000 for each plan?

Mr. JAHNCKE. No, sir.

Senator VARDAMAN. Then that is about $42,000 more than you expected to pay, is it not?

Mr. JAHNCKE. Yes, sir.

Senator VARDAMAN. I say, you must have gotten a pretty broad margin in that contract?

Mr. JAHNCKE. That is where you are wrong, Senator. I doubt if we will make 3 per cent on the contract. I want to tell you, sir, that I had an opportunity of building 12 submarine chasers at $52,000 apiece, and I would have cleaned up $20,000 per boat. I would have made a very good profit. But I did not want to do that; I wanted to build ships.

Senator VARDAMAN. Are you building a fabricated ship?

Mr. JAHNCKE. I am building a modified fabricated ship.

The CHAIRMAN. Did you have any discussion with Mr. Ferris out modifications and changes, and why they were changed?

Mr. JAHNCKE. No, sir; not at all. My engineer, Mr. Guerin, attended to that whole business. I do not know a thing about that, sir.

Senator RANSDELL. You are not a ship engineer yourself?

Mr. JAHNCKE. No, sir. Senator Vardaman, do you not believe I am right in this matter, if you will allow me, before you go?

Senator VARDAMAN. I have not seen anything from your statement to cause me to think otherwise. It seems to me you have been a victim; instead of pinching anybody, it looks to me as if somebody had held you up.

Senator RANSDELL. He certainly has been fair and open all the way through, trying to do his best.

Senator VARDAMAN. I think somebody held up on those plans.

Senator RANSDELL. He should have got the plans. [To Mr. Jahncke:] You are working on somebody's plans now. Can you tell us what they are charging you for those plans? Do you know, really—have you got figures on them?

Mr. JAHNCKE. No, sir, I have not—yes, we have got one statement from the Shipping Board, saying that the plans were up to that time, I think, about $3,000.

Senator RANSDELL. You have only got part of the plans?

Mr. JAHNCKE. Yes, sir.

Senator RANSDELL. You have not begun to do very much?

Mr. JAHNCKE. No, sir.

Senator RANSDELL. Do you gentlemen wish to ask Mr. Jahncke any further questions?

The CHAIRMAN. It seems not.

STATEMENT OF MR. L. H. GUERIN, CHIEF ENGINEER JAHNCKE SHIPBUILDING CO., NEW ORLEANS, LA.

Senator RANSDELL. Mr. Guerin, will you give us your name?

Mr. GUERIN. L. H. Guerin.

Senator RANSDELL. Where were you born?

Mr. GUERIN. In France.

Senator RANSDELL. How long have you lived in this country?

Mr. GUERIN. Twenty-one years.

Senator RANSDELL. Is New Orleans your residence?

Mr. GUERIN. Now; yes.

Senator RANSDELL. And what is your occupation?

Mr. GUERIN. Consulting engineer up to last September, and now chief engineer for the Jahncke Shipbuilding Co.

Senator RANSDELL. If you would like me to do so, I will read your statement. [Reading:]

[illegible]

The chairman and members of the [illegible] Senate, Washington, D. C.

GENTLEMEN: I have read [illegible] sent to your committee by Mr. [illegible] incorporated in the hearings [illegible] spondence and documents [illegible] building Co., the Emergency Fleet [illegible] sheets Nos. 82, 83, 87, 88, 89, 90 and 91 [illegible]

In further elucidation of the [illegible] documents, I beg leave to submit the following statement.

There are three separate and [illegible] subjects covered by the correspondence and documents, to wit:

First. An agreement between the Jahncke Shipbuilding Co. and Mr. Ferris for the preparation of plans and specifications for the vessels covered by contract No. 93SC.

Second. A claim by Admiral Bowles that the new plans are only a change from the intended original plans.

Third. A claim by Admiral Bowles of a large saving in cost of construction under the new plans and an intimation of intention on the part of the contractor to profit by same.

The first subject is the only one which should have been brought to your attention as it covers matters which are now under investigation; namely, the relations of Mr. Ferris in his capacity as naval architect and consulting engineer with agents and contractors for the Fleet Corporation.

The second and third subjects are well covered, and provided for in Article VII of our contract with the Fleet Corporation, representing the United States of America, and should have been made, when definitely proved, the subject of correspondence between the Fleet Corporation and the Jahncke Shipbuilding Co., in strict accordance with the terms and provisions of the contract.

However, as Admiral Bowles has seen fit to bring these matters to your attention, I will beg leave to present our side of the case.

Subject 1. An agreement between the Jahncke Shipbuilding Co. and Mr. Ferris for the preparation of plans and specifications for the vessels covered by contract No. 93SC.

From the evidence already in your records and that presented by Mr. Ernest Lee Jahncke in his testimony of even date, there will be no doubt in your minds as to the following facts:

That the plans were to be furnished to us by the Fleet Corporation.

That from October 19 to November 27, 1917, we made every conceivable effort to procure said plans, without success.

That Admiral Bowles was unable to force the Submarine Boat Corporation agents for the Emergency Fleet Corporation, to deliver to us the said plans upon our tender of payment and our guarantee of release in case of errors in said plans.

This is proof of a loss of 40 days.

I now refer you to Article VIII of our contract, in part, as follows: "It is agreed by both parties that time is the essence of this contract * * *." My company was not worried by the loss of time on the basis of a penalty of $30 per day for failure to deliver on time, but worried only by the failure to deliver on time vessels needed by our Government.

In consideration of all the above-mentioned facts, I applied to Mr. Ferris' New York office for relief and this part of the transactions is well covered by my sworn statement now in your records.

If I have done wrong in applying to Mr. Ferris's New York office, I have done so unknowingly. I was not, and could not, be aware of the conditions imposed upon Mr. Ferris by Admiral Bowles in his letter of September 5, 1917, and thought that the title of "consulting engineer" of Mr. Ferris in regard to the Fleet Corporation's business meant, as it does in engineering practice, that Mr. Ferris would devote some of his time to the Fleet Corporation and the balance to his private clients. My thinking so was wrong, it seems, to the extent of the time elapsing between September 5 and November 21, 1917.

Now comes the question of the "fee" agreed upon between myself and the head man of Mr. Ferris's New York office. This fee was $20,000. Was it so large and out of proportion as to warrant the insinuations contained in Admiral Bowles's testimony? Was there to be a "bonus" to me for bringing the work to the office?

As to the size of the fee, I refer you to Mr. Jahncke's letter to Admiral Bowles dated November 30, 1917, and now in your records, wherein it is stated that the cost of plans to the Submarine Boat Corporation was, on November 1, approximately $38,000. Said amount was mentioned to me by Mr. Sutphen a few days later, and the plans were still so incomplete that that was one of the reasons advanced by Mr. Sutphen for his refusal to deal with us.

How can there then be enough in a fee of $20,000 for a complete set of plans to allow for a bonus to me or anybody else, when the Submarine Boat Corporation had already paid about $38,000 for incomplete plans?

Although not asked for it, I willingly gave a sworn statement of all transactions to Admiral Bowles and included one original and one copy of the agreement with Mr. Ferris, and I pride myself in the fact that this agreement pr

tects most completely the interest of the Fleet Corporation and the Jahncke Shipbuilding Co. This statement, as mentioned therein, covers absolutely all transactions with Mr. Ferris's New York office, and there were no other "verbal" conditions or promises made.

Please also note that, according to Admiral Bowles's telegram to my company, dated November 28, 1917, we would have had to pay not over $2,000 per ship for the plans, or a total of not over $12,000 for the six ships under our contract.

In addition to this, we would have had to pay from eight to ten thousand dollars to make all the changes necessary for the installation of entirely different machinery in our ships.

We expected the Fleet Corporation to furnish us complete plans in accordance with promises made, but we also expected to spend $20,000 in paying for same and in having them amended to suit our contract, and this is the amount stated by me in my transactions for the plans as the "maximum I could afford to pay."

Next comes the question, "Would it have been possible for me, under any kind of promises, offers, etc., to obtain from Mr. Ferris for our ships a design made solely for the purpose of saving in materials (and thereby saving in cost), even if the design had to be inferior to what the Government expected to get from us." This is absolutely impossible, as the making and signing of any plans by Mr. Ferris either for private parties or for the Fleet Corporation has no value until said plans are checked and formally approved as satisfactory by Lloyds Register and the American Bureau of Shipping. This is one of the conditions of our proposed agreement with Mr. Ferris, and our plans have the full approval of the above-mentioned classification societies, with even, if I am not mistaken, a better rating than the Submarine Boat Co.'s design.

I trust the above facts will eliminate the possibility of intentional wrongdoing on my part in applying to Mr. Ferris's New York office for assistance in the preparation of the plans necessary for the prosecution of our contract with the Fleet Corporation.

Subject 2: A claim by Admiral Bowles that the new plans are only a change from the intended original plans.

The ships covered by our contract could never have been "duplicates" of those being constructed by the Submarine Boat Corporation, as the machinery to be used by us was entirely different from that used by the Submarine Boat Corporation. The entire midship section would have had to be redesigned entirely, and our contentions in this matter are substantiated in a letter from Mr. Ferris to Admiral Bowles, dated December 13, 1917, which we find printed in your records, Sheets Nos. 89 and 90 DDH. When we asked the Fleet Corporation to furnish us with the plans of the Submarine Boat Corporation, it was our desire and intention to save time by using those parts of said plans which could be used in our boats without changes, to wit, the bow and part of the stern framing, and also get an idea of the kind of construction now called "fabricated ship" and which is new to all of us.

When Admiral Bowles failed in his efforts to get us the plans from the Fleet Corporation's agents we had to revert at once to the provisions of our signed contract, of which, I trust, a copy is now before you. Referring you to Article I, paragraph 3, "Work," you will note that "the contractor hereby agrees to construct at its own risk and expense, in accordance with the contractor's drawings and specifications (all drawings and specifications, before binding on the owners, must bear the acceptance of and approval by the owner or its duly authorized representative) [note that this does not mention the naval architect] hereto attached and made part of this contract, under the rules and regulations of the American Bureau of Shipping 1916 Rules and of Lloyds. Number of vessels covered by contract, ———, of the Ferris type, of 5,000 dead-weight tons each; 10½ knots speed at deep load draft."

Based on these conditions of our contract, we have designed an entirely new ship with the exception that we have maintained the same general dimensions as to length, beam, and depth to top of camber of upper deck as were existing in the design of the original 5,000-ton type of vessel as now being built by the Submarine Boat Corporation. The only fault with our design is that, instead of being able to carry only 5,000 tons, it will be able to carry in excess of 5,500 tons, as mentioned by Mr. Ferris in his letter to Admiral Bowles dated December 14, 1917, and a part of your records. This would hardly be considered as a fault

if the vessel does not cost more than the original contract price for a 5,000-ton vessel. Moreover, from the letter just mentioned we gather the fact that had we followed the design of the Submarine Boat Corporation we would have been at fault anyhow, as this design shows a carrying capacity of 5,500 tons, which is also in excess of the contract tonnage.

Our vessel will certainly be of the Ferris type called for, as it is designed by Mr. Ferris.

As to the other condition, namely, a speed of 10½ knots, it will only be ascertained on the speed trial when vessels are completed, but with practically 200 horsepower more in our engine than in the Submarine Boat Corporation's and with admittedly better lines, we feel that the design brought out by us will be of great benefit to our Government, and we would deem it a favor, if it was at all possible, to have the respective merits of both designs reported upon to your committee by naval architects named by you and also to get an expression of opinion from Lloyds and the American Bureau of Shipping, if it is within their rules to express such an opinion in any other manner than by the giving of a rating to the vessels.

Therefore I claim that with the exception of an excess tonnage we have maintained and fulfilled the provisions of our contract, but that ours is a new design, which we tendered for acceptance as "contractor's plans."

Subject 3: A claim by Admiral Bowles of a large saving in cost of construction under the new plans and an intimation of intention on the part of the contractor to profit by same.

Even at this date, with orders placed for about half the steel entering into the construction of the vessels, it is impossible to know if there will really be a saving in the amount of steel to be used. This will only be known after the design is fully completed and the steel ordered for the entire construction.

As evidenced by our fabrication and erection agreements, our bid was based on a total of 1,650 short tons of steel per vessel (and we doubt very much if the new design will show less than that), and I hardly can understand the estimate of saving by Admiral Bowles, as mentioned in his memorandum of January 18, 1917 (No. 87 DDH). Admiral Bowles claims a saving of over $100,000 on six ships, or over $16,666 per ship. This is entirely ridiculous and far from being in accordance with the reports of the technical department, as evidenced by Mr. Ferris's letters to Admiral Bowles—dated December 14, 1917 (No. 89 DDH)—wherein it is stated that the maximum possible saving could be $10,000, if we are not credited with the increase in tonnage due to decrease in weight of steel.

But both Admiral Bowles and Mr. Ferris are wrong. The only saving we can possibly make, for our benefit, is that due to the cost of the saved raw materials to us, or, if we admit, as stated by Mr. Ferris in above letters, a saving of 60 tons of steel, the saving would be about $3,800 per ship.

We can not save on the cost of fabrication, as our agreement with the fabricators is based on 1,650 short tons of steel in the vessels and a saving of 60 tons per vessel would be equal to about 3 per cent of the total weight. A contract for fabrication is always based on the number of pieces to be handled to cover a certain weight in a contract. It is, therefore, very easy for you to understand why the fabricators can not reduce their price if, under the new design, they will only handle, for instance, a piece of iron weighing 97 pounds whereas same piece would have weighed 100 pounds under the previously contemplated design. The difference in weight is not considered, as the material is handled by a machine which could, for the same price and within the same time handle a piece much heavier; but the lighter piece has the same number of holes to be punched, the same amount of work to be performed, as the heavy piece, and this is where the cost goes in fabrication. If we call on the fabricators to do the same amount of work on less tonnage they will insist on charging us more per ton. This is a fact that you can easily ascertain by calling on any fabricating company.

As to a saving in the cost by the use of multiple punching, this is more than "problematic," as mentioned by Mr. Ferris. If there was a saving in anything but time of delivery of fabricated materials this method of fabrication would or should, have been used by the Lackawanna Steel Co. in the fabrication of the vessels for the Submarine Boat Corporation.

The same reasoning applies to the driving of less rivets in the erection. We have to provide, for the erection of six ships only, equipment costing over

$120,000, which could be used just as well on the erection of 12 or 18 ships. With such an investment it is easy to understand why the erector is unable to make, at this late hour, a reduction in his price per ship. All of us had so arranged our plans as to do prompt and good work and make such a good showing as to warrant the Fleet Corporation in giving us the six additional ships, which are optional under our contract and on which our bid to the corporation was based.

In exchange for the small and problematic saving of $3,800 per vessel to the Jahncke Co., we give to the Fleet Corporation a ship which is of better and more shipshape construction, and will carry more cargo than the other on every trip it will make until goes to the scrap pile. Cargo-carrying capacity must have some value if we consider the fact that, according to the terms of our contract, we shall be "penalized" to the extent of $165 for each and every ton less in cargo-carrying capacity than the 5,000 tons mentioned in the contract. If there is a penalty for under tonnage why should Admiral Bowles so strongly object to a credit for over tonnage, when tonnage is what the country needs most at this time.

I am sorry, gentlemen of the committee, to have had to discuss here subjects 2 and 3, as this discussion does not bring us anywhere. These matters will have, as they should, to be brought, under the form of "claims" by either or both parties, to the attention of the general manager of the Fleet Corporation for his decision, said decision being subject to arbitration, if unsatisfactory to either of the parties, and these claims can only be presented when full proofs of the contentions are obtainable which is not the case at the present time, the work being incomplete.

In conclusion, I can assure you, gentlemen, that neither the Jahncke Shipbuilding Co. nor myself ever had any intention of claiming anything not belonging to us rightfully or of making excessive profits. We only claim a just and fair reward for our work as contractors, and nothing else. Our records can easily be investigated in the city of New Orleans, and [illegible] can only be found such as to place us in a light entirely different from that in which we are placed by the statements made by Admiral Bowles and now a part of your records.

Respectfully submitted

L. H. Guerin
Chief Engineer, Jahncke Shipbuilding Co.

Senator RANSDELL. Now, Mr. Guerin, I would like you to state why you found it necessary to make the contract which you did with Mr. Ferris or, rather, with his agent, Mr. Dermit.

Mr. GUERIN. Well, for the reason, Senator, that I had been in Washington and New York for two weeks going from the Fleet Corporation office in Washington to Mr. Ferris's office in New York, and was turned down every time without any reason at all. Knowing that the agreement had been made between Mr. Ferris and Mr. Jahncke, I could not understand the reason at all. I could do was to go to Washington and [illegible] lief, and you will find in the records [illegible] afternoon, the last letter I got from Admiral Bowles [illegible] of a letter from Admiral Bowles to the [illegible] anybody would take that letter as [illegible] it as such, and it was such, and yet I presented it to Mr. Ferris and he turned me down [illegible] think the Fleet Corporation [illegible] legal advice first," and [illegible] Admiral Capps"—I think [illegible] Capps was in New York [illegible] agreed with me entirely. I [illegible] any further. I am not going to [illegible] Bowles can not get the [illegible] Remember, gentlemen, [illegible]

Radford, that although we agreed in the contract to furnish the plans, that they would be furnished to us, but it was only a word; it was not a written contract, and if Mr. Radford had been eliminated from the Shipping Board or the administration changed, we would have been flat, with the contracts saying we must furnish our plans.

The CHAIRMAN. Did Mr. Radford, when he said he would get the plans from the Submarine Boat Co. for you, indicate that you would have to pay the Submarine Boat Co. for them?

Mr. GUERIN. That was an agreement between Mr. Radford and Mr. Jahncke; I was not present.

Mr. JAHNCKE. That is what he agreed.

The CHAIRMAN. You understand you had to pay?

Mr. JAHNCKE. Yes, sir; we never for one moment contended we did not have to pay for the plans.

Mr. GUERIN. Mr. Jahncke made an agreement with Mr. Sutphen whereby the cost of plans to us would not go over $8,000 per boat. That was, I suppose, in New York. That was on November 1 or 2.

Senator RANSDELL. $8,000, did you mean?

Mr. GUERIN. $1,000 per ship, meaning about $6,000 for our contract still. On November 28 we advised Admiral Bowles we could not wait any longer, and we received a telegram from him saying "Now we are ready to give you the plans, and these plans will not cost you over $2,000." Now, it is really funny that we can make an arrangement with the Submarine Boat Co. for $1,000 or less and the Fleet Corporation makes it $2,000 or less. Of course, we would have to pay the $2,000 just the same.

Senator RANSDELL. You had expected from the first to pay somebody for the plans?

Mr. GUERIN. We had to spend $20,000 to have a complete set of plans.

Senator RANSDELL. You understood that from the first?

Mr. GUERIN. Entirely.

Senator RANSDELL. You would have to pay somebody.

Mr. GUERIN. We knew that we would have to pay somebody.

Senator RANSDELL. And you expected to pay it to the Submarine Boat Co.?

Mr. GUERIN. Part to the Submarine Boat Co. and part to somebody else, in order to make the necessary changes.

Senator RANSDELL. From the plans of the Submarine Co.?

Mr. GUERIN. Yes.

Senator RANSDELL. On account of your having different machinery from what they had been using?

Mr. GUERIN. Yes, sir; the mid part of the ship would have to be changed entirely.

The CHAIRMAN. Do you understand those changes to be to your advantage and save you something like $100,000?

Mr. GUERIN. What changes?

The CHAIRMAN. Did you understand that those changes would be to your advantage and save you something like $100,000?

Mr. GUERIN. No, sir; I did not know that at the time. Of course, we bought the reciprocating engines, and we knew at the time we bought them that we would have to have different plans from the Submarine Boat Co. for the midship section of the vessel; but of

if we could have used the bar framing and part of the stern
g, excepting where the shafting goes, it would be different.
tor RANSDELL. Under the plans which Mr. Ferris was to give
would there have been a saving to your company or under
as originally contemplated that your plans were to be: and if
much of a saving?
GUERIN. Senator, nobody knows at this time, and I am really
ed at the naval architect making such a statement when he has
pleted his drawings yet.
tor RANSDELL. Mr. Guerin, if there be a saving, will that not
and be thrashed out and adjusted under paragraph 7 of your
t?
GUERIN. Entirely, Senator; that is the only time it will be ad-

tor RANSDELL. Before there is a final payment made every-
f that kind will appear and be adjusted under this paragraph?
GUERIN. And be adjusted by the general manager of the corpo-
and then, by arbitration, if we do not accept his decision.
tor RANSDELL. And you do not know now whether there will be
ing or not?
GUERIN. Nobody knows.
tor RANSDELL. You said in your written statement there that
sibly may use 60 tons of steel less than under the plans of
marine Boat Corporation. Explain that, will you?
GUERIN. Mr. Ferris said that.
tor RANSDELL. Mr. Ferris?
GUERIN. Yes; Mr. Ferris; I do not.
tor RANSDELL. Assuming that it be true, as you have explained
ry clearly, you do not know whether that will result in any

GUERIN. Oh, yes——
tor RANSDELL (interposing). Excepting the bare cost of the
l.
GUERIN. Which, of course, we return to the Government; we
buy it; they pay for the material anyhow.
tor RANSDELL. Under the contract the Government pays for
erial.
GUERIN. Yes.
tor RANSDELL. So you could not possibly get the benefit of that
there was that saving.
GUERIN. We could not.
tor RANSDELL. All of the material is furnished under the
f this contract by the Government. You do not buy the ma-

GUERIN. We give them a list of what we require and they go
y pay for it.
tor RANSDELL. But you pay for the fabricating.
GUERIN. We pay for the fabricating and for the erection.
tor RANSDELL. And, here, you do not think the fabricator
e willing to charge you one cent less.
GUERIN. Let me give you a little explanation. Here is a little
f steel [illustrating with match holder], and, we will assume,
s 10 pounds, and to make it of that shape it is going to cost
for labor for shaping it. Suppose I give you that same

for 10 pounds; that would be $1 a pound. Suppose I asked you to make that of lighter material, so that it will weigh only 5 pounds. Could you charge me $1 a pound? Will you not have the same $10 worth of labor applied on 5 pounds instead of 10 pounds?

Senator RANSDELL. I would think so.

Mr. GUERIN. If it was very large—a very great difference—they would cut the price; but it is only a difference of 3 per cent.

Senator RANSDELL. In your written statement, I believe, you figured out this 60 tons, and if there be 60 tons difference that would be about 3 per cent of the whole.

Mr. GUERIN. Yes; that would be a little more than 3 per cent.

Senator JOHNSON. What was the date, Mr. Guerin, you went first to see Ferris's office or his manager in New York?

Mr. GUERIN. That was on November 21; that is, coming from Mr. Sutphen's office.

Senator JOHNSON. You had presented the letter of Admiral Bowles, which constituted an order to Sutphen on that day?

Mr. GUERIN. At 12 o'clock.

Senator JOHNSON. And then subsequently you went to see Mr. Ferris's man.

Mr. GUERIN. In New York.

Senator JOHNSON. Was any statement at that time made by Mr. Ferris's manager as to the amount which would be charged you for these plans?

Mr. GUERIN. We discovered that matter right away. I, first of all, asked Mr. Dornin if he could not make such a plan, and after a while he said, "Yes; I think I could make you a design of a boat that would be exactly on the same line, the same type, as the submarine boat; but I think it would be better from the point of view of construction."

Senator JOHNSON. Was anything said in that conversation about the boat costing less?

Mr. GUERIN. No, sir; there was never anything said until I read that yesterday in Mr. Ferris's statement.

Senator JOHNSON. Was there anything in the conversation about the price he would charge you for making the plans?

Mr. GUERIN. Yes; we went over the possible cost, and, as an engineer, I wanted to discuss that very fully. So we counted the number of draftsmen, of engineers, tracers, the cost of blue printing, and so on, and we arrived at the price of, if I remember correctly, $1,084 per week for the cost of these plans.

Senator JOHNSON. That would aggregate about how much, please?

Mr. GUERIN. We made it aggregate a little over $25,000.

Senator JOHNSON. Did you then have some negotiation about the price, saying you could not pay that much?

Mr. GUERIN. I told him right there, "Mr. Dornin, it is impossible for me to go any further. I can go as far as $20,000, but I did not expect to pay more than that," and I asked him personally to telephone to Mr. Ferris to see if he could, first, do the work; and, second, do it for $20,000.

Senator JOHNSON. Did he, at your instance, telephone Mr. Ferris?

Mr. GUERIN. He then telephoned to Mr. Ferris from the New York office to Mr. Ferris at Washington.

Senator JOHNSON. Did Mr. Ferris decline?

Mr. GUERIN. Mr. Ferris declined to discuss the matter.

Senator JOHNSON. And then did you and Mr. Dornin come to Washington?

Mr. GUERIN. I begged Mr. Dornin to help me some more, and asked him if he would not come to Washington with me that same evening and go and see Mr. Ferris and talk to him, which could be done better that way than by telephone.

Senator JOHNSON. Did you both come to Washington that night?

Mr. GUERIN. We came together to Washington that night.

Senator JOHNSON. Did you meet Mr. Ferris?

Mr. GUERIN. I did not.

Senator JOHNSON. Did you at any time meet him and talk to him?

Mr. GUERIN. I did not at all.

Senator JOHNSON. Did you, Mr. Dornin, and Mr. Ferris meet together at any time?

Mr. GUERIN. We never did.

Senator JOHNSON. You reached here about what time that night?

Mr. GUERIN. We reached Washington about half past 6 in the evening.

Senator JOHNSON. Did you see Dornin later in the evening?

Mr. GUERIN. Oh, he was with me.

Senator JOHNSON. I know that, but he went to see Ferris?

Mr. GUERIN. Yes.

Senator JOHNSON. You did not go to see Ferris?

Mr. GUERIN. I did not go, and I waited for Dornin, and he came back—I waited until 11 o'clock in the lobby. He did not come back, and I went to my room, and when he came back it was about 11.30, and he reported again a refusal. Now, I begged him again to try it again the following morning.

Senator JOHNSON. The following morning?

Mr. GUERIN. The following morning.

Senator JOHNSON. What did he do?

Mr. GUERIN. The following morning Mr. Dornin returned again to Mr. Ferris's office. It must have been about half past 8 or 9 o'clock in the morning, and he came back at half past 11 in the morning very much in a hurry, because he wanted to get that 12 o'clock train, or somewhere around that time, back to New York. He reported Mr. Ferris had agreed, as a favor, to do the work for us at $20,000.

Senator JOHNSON. How long did you remain in Washington?

Mr. GUERIN. Until the following day; I left the following night.

Senator JOHNSON. Did you go to the Shipping Board?

Mr. GUERIN. I went to the Shipping Board.

Senator JOHNSON. Did you while in the Shipping Board, say anything to anybody about having made the agreement with Mr. Ferris.

Mr. GUERIN. I think I mentioned that to Mr. Cox, Admiral Bowles' assistant. I went to the Shipping Board Building on business connected with our other contract, and I met Mr. Cox in the hall. He said, "Come in, Guerin; I want to see you"; and I went in his office. He said, "Why did you not come to see me when Mr. Sutphen turned you down?" I said, "Mr. Cox, that is all right, but what do you want me to do now?" "Oh," he said, "I think I could help you out." I said, "I do not think you could." He said, "Why?" And then I explained the matter entirely, especially

I mentioned the matter of Admiral Capps agreeing with Mı phen. "Oh," he said, "in that case you are perfectly right; y not touch it."

Senator JOHNSON. Did you tell him what you were doing the plans?

Mr. GUERIN. I told him we were making other arrangements the plans.

Senator JOHNSON. With Mr. Ferris?

Mr. GUERIN. I did not mention any names.

Senator JOHNSON. Why?

Mr. GUERIN. Because they were not made at all.

Senator JOHNSON. What time was it you saw Cox?

Mr. GUERIN. The following evening.

Senator JOHNSON. Had you not been told by Dornin at 11.3 Ferris would make the plans?

Mr. GUERIN. That was a preliminary arrangement; that l be passed over and signed by my company and Mr. Ferris. not authorized to sign any greement; nothing could be final, Se until my company and Mr. Ferris had signed the agreement.

Senator JOHNSON. Did you sign the agreement?

Mr. GUERIN. I signed a preliminary agreement; that is, v down what was agreed on.

Senator JOHNSON. When did you sign the preliminary agree

Mr. GUERIN. On November 23, a quarter to 12 in the mornin

Senator JOHNSON. Two days after you came here or the d lowing?

Mr. GUERIN. I had been in Washington nearly 10 days.

Senator JOHNSON. You were in New York on the 21st, as I stood.

Mr. GUERIN. I was in New York on the 21st.

Senator JOHNSON. You came back here on the night of the 2

Mr. GUERIN. On the 22d.

Senator JOHNSON. On the night of the 21st?

Mr. GUERIN. Yes; on the night of the 21st—yes, the 22d.

Senator JOHNSON. Well, you say the night of the 22d or the of the 21st?

Mr. GUERIN. The 22d.

Senator JOHNSON. You came to Washington?

Mr. GUERIN. To Washington.

Senator JOHNSON. Then it was the morning of the morni the 23d at 11.30 that Dornin said Ferris would make the

Mr. GUERIN. Yes, sir.

Senator JOHNSON. When was it that you then went to the Shi Board and had the conversation with Cox?

Mr. GUERIN. On the 24th at about 2 o'clock in the afternoc first time I met him.

Senator JOHNSON. But you were immensely relieved at 11.30 you found that you could get Ferris to make these plans?

Mr. GUERIN. Oh, yes.

Senator JOHNSON. All right. When you met Coxe you d mention Ferris' name?

Mr. GUERIN. I did not.

Senator JOHNSON. Now, tell me why you did not mention l name, again, please.

Mr. Guerin. As I said, there was no arrangement made. There as an arrangement made between Dornin of Mr. Ferris' office and yself; that is, we would put down as agents what was agreed on.

Senator JOHNSON. You had agreed, had you not?

Mr. GUERIN. Oh, yes.

Senator JOHNSON. For $20,000 for the plans at 11.30?

Mr. GUERIN. At 11.30.

Senator JOHNSON. Why was it you did not tell Cox at 2 o'clock hen you met him?

Mr. GUERIN. Beg pardon?

Senator JOHNSON. I did not catch your answer.

Mr. GUERIN. First, I do not think I thought about it, the mentioning of a name at that time. Of course, if I had known what I know now, I would understand why there was something wrong in not mentioning the name.

Senator JOHNSON. Who else did you see at the Shipping Board besides Cox when you were there that afternoon.

Mr. GUERIN. Many people, but on other business.

Senator JOHNSON. Did you see Admiral Bowles?

Mr. GUERIN. I did not.

Senator JOHNSON. Did you call on him at all?

Mr. GUERIN. No, no: I went to Mr. Cox, or Mr. Cox called me.

Senator JOHNSON. Tell me some other persons you saw. You went there on business, you say?

Mr. GUERIN. I remember seeing Mr. Bender of the Auditing Department, and Mr. Eastman, his assistant.

Senator JOHNSON. Who else?

Mr. GUERIN. And if I am not mistaken; I would not swear to it, but I think I met Mr. McAuliffe.

Senator JOHNSON. Did you talk to any of those gentlemen about your plans?

Mr. GUERIN. Oh, yes—about our plans?

Senator JOHNSON. Yes.

Mr. GUERIN. Oh, no.

Senator JOHNSON. About having a change of plans?

Mr. GUERIN. No. sir.

Senator JOHNSON. When was the contract signed by you, or the tentative program, or preliminary agreement?

Mr. GUERIN. Well, it was on the 23d of November.

Senator JOHNSON. Was that the same day you are speaking of now?

Mr. GUERIN. No. sir.

Senator JOHNSON. The day you went there?

Mr. GUERIN. No. sir. I went there the day after.

Senator JOHNSON. What time in the day was that preliminary agreement was signed?

Mr. GUERIN. 11.30 or a quarter to 12.

Senator JOHNSON. At night?

Mr. GUERIN. Oh. no: in the morning.

Senator JOHNSON. You had already agreed at 11.30, when Dornin came to you: you had then signed it?

Mr. GUERIN. I say we signed it between 11.30 and 12 o'clock, because I know he took the 12 o'clock train.

Senator JOHNSON. Then, when you were in the Shipping Board the next afternoon you had already signed the agreement?

Mr. GUERIN. Oh, yes.

Senator JOHNSON. You and Dornin?

Mr. GUERIN. For the plans; yes, sir.

Senator JOHNSON. Did you mention to anybody in the Shipping Board at any time anything with respect to that agreement?

Mr. GUERIN. I did not.

Senator JOHNSON. When did you leave Washington on that occasion?

Mr. GUERIN. On that same night at 10.45.

Senator JOHNSON. Did you at any time see Ferris that afternoon?

Mr. GUERIN. I never did since then. The last time I saw Mr. Ferris was on November 19, which was long before I had all this trouble with the plans.

Senator NELSON. Did you ever try through Mr. Ferris to get the contract from the submarine company?

Mr. GUERIN. To get the plans from the submarine company?

Senator NELSON. Yes.

Mr. GUERIN. I did not; no, sir.

Senator NELSON. You did not ask him to help you?

Mr. GUERIN. I did not ask him at all. I presented him a letter when I came, that letter of introduction to Mr. Sutphen and Mr. Ferris. That was a letter which is in your records now, telling Mr. Ferris that we had authorization to get the plans from the Submarine Boat Co. and to please see they were in good shape and approved before we used them, which was his official business.

Senator JOHNSON. Did any correspondence or any dispatches pass between you and your house on the 22d or 23d?

Mr. GUERIN. Yes—no; not on the 22d or 23d.

Senator JOHNSON. When you entered into your contract with Dornin, did you wire your house?

Mr. GUERIN. Yes; there is one telegram in here [referring to papers].

Senator JOHNSON. And what date is that telegram?

Mr. GUERIN. On November 14.

Senator JOHNSON. Now, I am referring to the 22d or 23d.

The CHAIRMAN. After that.

Senator JOHNSON. Have you any telegrams there from you to your house of date the 23d?

Mr. GUERIN. Senator, I must have about—surely not less than 10 telegrams every day.

Senator JOHNSON. Did you wire after 11.30 on the 23d, when you got a contract with Dornin?

Mr. GUERIN. On the 23d—not that I remember, because I was leaving that same evening; I may have, but I do not remember.

Senator JOHNSON. Well, necessarily, you would wire, would you not, completing a contract of that importance and finally settling a very vexed question?

Mr. GUERIN. Excepting for this, Senator, that after I left Mr. Dornin, or after he left, I was at the Shipping Board's office, which means the Munsey Building, and what you call F Street, and then after that interview with Mr. Coxe, I saw him first at 2.30, or some-

s around there, and he asked me again to come back at 4 o'clock good news," and I came at 4 o'clock, and he made me wait until nd then I met him, and he told me he had seen Admiral Capps, Admiral Capps denied everything, and I remember that night ner with Mr. Bender and Mr. Eastman, of the Shipping Board ing department, and I took my train at 10.45.

ator JOHNSON. Did you have dinner with those two gentlemen Shipping Board that night?

. GUERIN. Yes, sir.

ator JOHNSON. And at 5.30 did Mr. Coxe tell you that Admiral s denied he ever said anything?

. GUERIN. At 5.30.

ator JOHNSON. When he told you that did you not tell him that ad made arrangements for the plans with Dornin and Ferris?

. GUERIN. I did not.

ator JOHNSON. Why?

. GUERIN. I am not authorized to give out any information, or, until my action has been approved by my company. How know that Mr. Ferris would really sign a formal contract? He did.

ator JOHNSON. You did not want to give out any information spect of your company because they had not authorized it as is that correct?

r. GUERIN. No; the terms of the contract were not known to my any.

nator JOHNSON. Had you had any authorization to enter into agreement with Ferris for $20,000 from your company?

r. GUERIN. I have a telegram [referring to papers] in answer to elegram to New York, as follows:

phen declined to give any drawings until his first unit is [illegible] his responsibility and also says that only small part of plans are [illegible] d. This is final with him and the next step must be taken in Washington. e must make our own plans.

enator JOHNSON. Date?

Mr. GUERIN. Date, November 14.

enator JOHNSON. Were you authorized then?

Mr. GUERIN. Just a minute——

ire me instructions at [illegible] e this most important question.

enator RANSDELL. That was from you and addressed to Mr. ncke?

Mr. GUERIN. Yes, sir.

enator RANSDELL. At New Orleans?

Mr. GUERIN. Yes.

enator RANSDELL. What was the reply?

Mr. GUERIN (reading):

ggest you see Ferris at once. [illegible] factorily. If this can not be done [illegible] t. Show in Washington.

Senator JOHNSON. Date?

Mr. GUERIN. November 15.

Senator JOHNSON. Now, did you have any authorization fr company to enter into a contract for $20,000 with Ferris?

Mr. GUERIN. I did not.

Senator JOHNSON. How did you happen to fix that sum could not go above it?

Mr. GUERIN. Because that was a sum that we had agreed t our estimates for plans and specifications.

Senator JOHNSON. Who had agreed to pay it, please?

Mr. GUERIN. We had—the Jahncke Shipbuilding Co.

Senator JOHNSON. Then the Jahncke Shipbuilding Co. thorized you to pay $20,000?

Mr. GUERIN. $20,000 was my limit.

Senator JOHNSON. Yes. So that you had the authorizati them in some form or other on the 23d of November, when y your tentative contract with Dornin, had you not?

Mr. GUERIN. Oh, I had that authorization before I le Orleans.

Senator JOHNSON. Verbally was it given to you?

Mr. GUERIN. Verbally, of course, Senator; that was the pr was included in the cost of the ship.

Senator RANSDELL. That is, when you first entered into a c was it not, you figured $20,000 for your plans and specificatic

Mr. GUERIN. Yes.

Senator RANSDELL. You first entered into the contract on t day of October?

Mr. GUERIN. That is, we sent in our bid on the 21st of Sep

Senator JOHNSON. Have you any telegrams exchanged you and your house later than the 14th or 15th day of Novem

Mr. GUERIN. Senator, I am not sure. There must be some. were some telegrams in regard to the matter. I never sent l 8 or 10 telegrams every day. I do not find any originals fo However, I must say that when Mr. Jahncke wired me to co I only took the papers that were really necessary. There others, but I doubt it very much, because I left the same ni I did not have much of a chance to send a telegram. I kn there was none to my house, because I did not get a chance.

Senator RANSDELL. You mean your residence?

Mr. GUERIN. Yes.

Senator RANSDELL. He did not get a chance to notify th he was leaving.

Senator JOHNSON. When was the first time you had a ta Admiral Bowles about the matter, after the 23d?

Mr. GUERIN. I never had any until I came to give him statement about the whole transaction.

Senator JOHNSON. What date was that?

Mr. GUERIN. That was on December 18.

Senator RANSDELL. You are aware, Senator, that he has statement in here covering this thing in full?

Senator JOHNSON. Yes.

he CHAIRMAN. I have two letters here, one from Admiral Bowles, ich came in this morning, and one from Mr. Piez, which says ding]:

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, February 4, 1918.

. DUNCAN U. FLETCHER,
United States Senate, Washington, D. C.

Y DEAR SENATOR: Supplementing letter sent by Admiral Bowles concerning Ernest Lee Jahncke, may I say that our dealings with this company indi- that they have the enterprise and energy to meet their contract deliveries, that we are firmly convinced of their honesty of purpose.

Sincerely, yours,

CHARLES PIEZ,
Vice President and General Manager.

And the other from Admiral Bowles, addressed to me as chairman, d to the committee [reading]:

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, February 2, 1918.

n. DUNCAN U. FLETCHER,
Senate Committee on Commerce,
United States Senate.

Y DEAR SENATOR: I am glad to note that Mr. Ernest Jahncke is to appear ore your committee.

beg to remind you of the purport of the statement which I made to the mmittee on Commerce in executive session that Mr. Jahncke had made upon a firm impression of integrity and reliability and that I was very reluctant believe that he had entered knowingly into the arrangement with Mr. Ferris make his plans with any appreciation of its impropriety or with any intention evading the terms of his contract.

his impression I still retain, and I am glad that you and the members of committee will have an opportunity to form your own judgment, which I st will confirm mine.

Very truly, yours,

F. T. BOWLES,
Assistant General Manager.

Are there any other questions?

Senator RANSDELL. I would just like to reiterate one or two questions.

Would it have been possible for your company to have favored ything under the change in the plans, which were supposed to ve been made by Mr. Ferris? Could you have saved anything ssibly out of that or would anything have been adjusted necessarily before you settled up finally on these ships?

Mr. GUERIN. Everything in our contract is subject to the approval the Fleet Corporation. We can not buy a piece of machinery orth $5 without the approval of the Fleet Corporation.

Senator RANSDELL. And they furnish you with all that material, they not?

Mr. GUERIN. They furnish us with all the steel.

Senator RANSDELL. And they have inspectors that go over it at ur yard?

Mr. GUERIN. Everything.

Senator RANSDELL. Watching everything you do.

Mr. GUERIN. Watching every detail.

Senator NELSON. Where is your yard?

Mr. GUERIN. At New Orleans.

Senator NELSON. I mean at Algiers?

Mr. GUERIN. No; on the other side of Lake Pontchartrain, Madisonville.

Senator NELSON. Across Lake Pontchartrain?

Mr. GUERIN. Yes; on the river.

Senator RANSDELL. It is about 24 miles from the head of Ca Street.

Mr. GUERIN. Yes, sir.

Senator NELSON. Can you get out to the Gulf from your place!

Mr. GUERIN. Oh, yes, Senator. We have 14 feet of water and c boats will not draw, equipped, over 10 feet.

Senator NELSON. And you can get out into the sound?

Mr. GUERIN. Oh, yes; Lake Pontchartrain, to Rigolette on t Chefuncte, and then out in the Gulf through the channel.

Senator NELSON. Oh, yes; past Cat Island?

Mr. GUERIN. Yes.

Senator RANSDELL. Then, Mr. Guerin, there could not have be any motive on your part to get these plans, except that you we building a Ferris type of boat, and you failed absolutely, after pr longed efforts, to get them from anybody else?

Mr. GUERIN. Yes.

Senator RANSDELL. And you thought you were getting them fro the architect of the Emergency Fleet Corporation?

Mr. GUERIN. We wanted a Ferris plan. Our contract calls f the Ferris type of boat, and I do not know of anybody that cou design a Ferris type of boat except Mr. Ferris. I was a stranger New York and almost a stranger in this country, and I thoug really that if Mr. Ferris was good enough for the Fleet Corporati he surely ought to be good enough for us. I must admit I made mistake. I should have thought about that. But there could n be any question of unfair dealing, for the reason I mentioned in n statement. Mr. Ferris could not, if he wanted, cheat the Fl Corporation.

Senator HARDING. Mr. Guerin, do you not think it a little unusu that the specialist, working for the Corporation, should be chargi you a fee for a plan, payable directly to him?

Mr. GUERIN. If you will let me make a statement, now, that want you gentlemen to remember: We had an agreement with M Ferris for a complete set of plans for $20,000, and now it is in t hands of the Fleet Corporation, and I give you my word of hon that these plans are going to cost us $25,000.

Senator RANSDELL. Mr. Ferris is now furnishing you those pla at least up until the time he resigned?

Mr. GUERIN. And he would never have been able to make th for less than $25,000.

Senator RANSDELL. So you are actually operating under the pl Mr. Ferris is making?

Mr. GUERIN. Yes.

Senator RANSDELL. He did not make them for you, and he ma them for the Fleet Corporation, and they are charging you what had to get for them.

Senator JONES. And how much was he making them for for yo

Mr. GUERIN. $20,000, and he is making them for us for the Fleet Corporation, and that cost will not be less than $25,000.

Senator JONES. Under your agreement with Dornin, you were to pay Ferris's office $20,000?

Mr. GUERIN. $20,000 for the plans—for everything that goes into the boat.

Senator JONES. Ferris and his office would get $20,000 more than his salary he was getting from the Fleet Corporation?

Mr. GUERIN. Yes. There is another question, gentlemen, that comes up.

Senator RANSDELL. All right.

Mr. GUERIN. It is outside of the question, I suppose; but I want to show you in what position we are placed now. Mr. Ferris has resigned, and Mr. Ferris refuses to go any further on the agreement with the Fleet Corporation. He is a private citizen now; he does not receive any more orders from Admiral Bowles. Where do we stand? We have orders placed for 5,000 tons of steel out of 10,000 tons, but he has all the plans about 25 per cent completed. If you please, right now, who is going to give us the plans?

Senator RANSDELL. Has he refused to go on, do you know?

Mr. GUERIN. We have received a notice that he can not go on until he has further instructions from the Fleet Corporation. He has asked for instructions from the Fleet Corporation, and he has not got them.

Senator RANSDELL. You are between the devil and the deep sea right now.

Mr. GUERIN. We are, Senator; and we are ready to lay keels since the 1st of November, waiting on everybody.

The CHAIRMAN. Mr. Guerin, who is the manager of Mr. Ferris's office?

Mr. GUERIN. Dornin.

The CHAIRMAN. Did Dornin tell you that under Ferris's contract with the Fleet Corporation that he had the right to continue his office and private practice in New York?

Mr. GUERIN. He did not say so, Senator, for the reason that I remember asking him to telephone Mr. Ferris's office in Washington to know, first, if he would be willing to undertake the work, and, second, if he could see his way clear to do it for $20,000 instead of $25,000 that we had found the cost to be. Therefore the man surely did not know anything about Mr. Ferris's private affairs.

Senator RANSDELL. And you did not know anything about them?

Mr. GUERIN. No, sir. Furthermore, I think Dornin had been only a short time with Mr. Ferris, if I am not mistaken. I think he came with Ferris when Mr. Ferris moved his organization from New York to Washington, and I understand he came from Newport News Shipbuilding Co.—one of these big yards.

Senator RANSDELL. The summary of the whole thing is that your work was greatly delayed—practically 60 days—after signing the contract?

Mr. GUERIN. Senator, it has not yet begun.

Senator HARDING. It is still delayed?

Mr. GUERIN. It is still delayed. We have spent a world of money to build a shipyard.

Senator HARDING. Let me ask you right there, Have you been and told Admiral Bowles and the other members of the Shi Board that you are held up by this situation?

Mr. GUERIN. Certainly we did.

Senator HARDING. Do they not promise any relief?

Mr. GUERIN. They promised nothing; they have not even ans the letter from Ferris. What do you want us to do with Ferris over and make another arrangement? Oh, no; I have been b once.

Senator HARDING. Do they not promise you any plans with you may proceed?

Mr. GUERIN. No, sir.

Senator RANSDELL. Since Ferris resigned the other day?

Mr. GUERIN. Senator, we have been in Washington only two and we came especially to appear before you, and we could not a until we had.

Senator HARDING. Let me make a suggestion to you. Yo your president go to the Shipping Board and find out definitely is going to be done with your contract,and then come her tell us.

Senator RANSDELL. That is good advice. If that Emergenc Corporation can not relieve a situation like you are up against, you are waiting to build boats, this committee wants to know

Mr. GUERIN. But, Senator, see where the danger is now abo breaking of the relation—we have actually taken orders for tons of steel at $63 average.

Senator RANSDELL. And you ought to have arrangements for ing plans.

Mr. GUERIN. And we have not a show of plans to tell us ho boats are to be built.

Senator RANSDELL. That is the reason I make the suggesti want you to put the case before them, and if you do not get i relief this committee would like to know.

Mr. GUERIN. I will.

Senator JONES. Tell them to have a naval architect assist

Senator NELSON. It leaves you in a bad predicament.

Mr. GUERIN. Especially when we are doing everything we c

Senator RANSDELL. They have been doing everything they from the first.

The CHAIRMAN. How far have you got with the ships?

Mr. GUERIN. Everything is ready.

The CHAIRMAN. Have you laid a keel yet?

Mr. GUERIN. We can not get any steel. In order to lay ke have to have plans to lay it by.

Senator RANSDELL. And you have not got any of them yet

Mr. GUERIN. No; we have placed orders without the plans

Senator NELSON. That is a horrid state of affairs.

The CHAIRMAN. We will now adjourn to meet to-morrow o'clock in the afternoon.

(Thereupon, at 5.40 o'clock p. m. the committee adjour meet at 2 o'clock p. m., Tuesday, February 5, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

TUESDAY, FEBRUARY 5, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m. in the committee room, Capitol, Senator Duncan U. Fletcher, presiding.

Present: Senators Fletcher (chairman), Ransdell, Sheppard, Vardaman, Bankhead, Nelson, Jones, Sherman, Harding, Calder, and Johnson.

The CHAIRMAN. Senator Calder expected to be here, but is delayed on account of the lateness of an incoming train. He telegraphed me that he wanted to be here when Admiral Harris made his statement, and has asked me to wait until he arrives before calling Admiral Harris.

In the meantime, Mr. Anderson is here, from the Pacific coast, and the committee will now hear him.

State your full name, please, Mr. Anderson.

STATEMENT OF MR. HERBERT J. ANDERSON, ASSISTANT SUPERINTENDENT MOORE & SCOTT IRON WORKS, OAKLAND, CAL.

Mr. ANDERSON. My name is Herbert J. Anderson.

The CHAIRMAN. Where do you reside?

Mr. ANDERSON. Oakland, Cal.

The CHAIRMAN. What is your business or occupation?

Mr. ANDERSON. Shipbuilder.

The CHAIRMAN. What position do you hold now with reference to any shipyard?

Mr. ANDERSON. I am assistant superintendent of the Moore & Scott Iron Works.

The CHAIRMAN. That is an old established concern, is it not?

Mr. ANDERSON. Yes, sir.

Senator NELSON. Are they building ships too?

Mr. ANDERSON. Yes, sir.

The CHAIRMAN. How long have they been engaged in building ships?

Mr. ANDERSON. They have been engaged in the shipbuilding business about seven or eight years. I do not remember exactly. I was not with the plant at that time.

The CHAIRMAN. What work have they on hand now?

Mr. ANDERSON. They are building 9,400-ton steel cargo steamers for the Emergency Fleet Corporation.

Senator NELSON. How many are they building—I mean fo Fleet Corporation?

Mr. ANDERSON. We have about 8 in course of construction ir plant, and contracts for probably 20 more.

Senator NELSON. When will you get any of those ready—I r ready and afloat?

Mr. ANDERSON. We have three in the water now, afloat.

Senator NELSON. Well, I mean ready to go to work on the oc

Mr. ANDERSON. Well, we are turning them out just as fast a can complete them, Senator. We got one away some time b the fore part of last week, and we are completing them about e 45 days. That is approximate.

The CHAIRMAN. You have three completed; how many of t are in actual commission?

Mr. ANDERSON. There are three boats that we have built—th requisitioned by the Emergency Fleet Corporation—that are no the service.

The CHAIRMAN. Those were all requisitioned ships?

Mr. ANDERSON. Yes, sir.

The CHAIRMAN. They are now in the service, are they?

Mr. ANDERSON. Yes, sir.

The CHAIRMAN. They were completed at your plant?

Mr. ANDERSON. Yes, sir; at our plant.

The CHAIRMAN. And then, in addition to that, you have l laid for other ships for the Emergency Fleet Corporation, have

Mr. ANDERSON. As fast as a boat is launched, before it is of slip, a keel is laid in the slip for another boat.

The CHAIRMAN. How many ways have you at the present ti

Mr. ANDERSON. Five at the present time. We are now consti ing two more, making a total of seven.

The CHAIRMAN. How many men do you employ?

Mr. ANDERSON. Approximately 4,000.

The CHAIRMAN. Could you employ more?

Mr. ANDERSON. Yes, sir.

The CHAIRMAN. How many more could you use?

Mr. ANDERSON. We could use at least 2,000 more.

The CHAIRMAN. Could you get the men out there, do you th

Mr. ANDERSON. We have plenty of unskilled labor, but we short of skilled labor.

The CHAIRMAN. Do you mean by "skilled labor" men to c rivets?

Mr. ANDERSON. Men who are qualified as ship fitters, riveters plate hangers, and slingers. The principal shortage occurs an those trades.

The CHAIRMAN. In what lines is the greatest skill required?

Mr. ANDERSON. The greatest skill is required by a ship fitter: a plate hanger--

Senator VARDAMAN (interposing). Will you name those again

Mr. ANDERSON. A ship fitter and a slinger and plate hanger: have to have some skill; and also a riveter.

The CHAIRMAN. The riveters can be trained within a few w ordinarily, can they not?

Mr. ANDERSON. It takes a little longer than that. We are ma them as fast as we can.

The CHAIRMAN. You are training them, you say?

Mr. ANDERSON. Yes, sir.

The CHAIRMAN. Are you actually training men?

Mr. ANDERSON. Yes, sir.

The CHAIRMAN. Are you building what are known as fabricated ships?

Mr. ANDERSON. Yes, sir; we are building ships of what is known as the Isherwood type.

Senator NELSON. Are they of the fabricated type—do you know what that means?

Mr. ANDERSON. We are fabricating them in our yards.

Senator NELSON. In your own yards?

Mr. ANDERSON. Yes, sir.

Senator NELSON. That is to say, you are putting the plates together in sections before you put them on the hulls of the ships?

Mr. ANDERSON. The transverses and the floors and the intercostals—those parts of the boat are assembled in our plant, and swung aboard the ship complete; yes, sir. Those things are riveted to the deck, and the shell plating is put on in the slip.

Senator NELSON. The outside sheathing plate in put on in the yard?

Mr. ANDERSON. That is all done in the yard.

Senator NELSON. The outside sheathing work is done on the ship, is it not——

Mr. ANDERSON. Yes, sir.

Senator NELSON (continuing). And not in sections that have been welded together outside of the yard?

Mr. ANDERSON. No, sir.

The CHAIRMAN. Have you any trouble about housing your employees?

Mr. ANDERSON. No, sir.

The CHAIRMAN. That difficulty has not troubled you so far?

Mr. ANDERSON. No, sir. A great many of our people live in San Francisco, across the bay, and they commute across to Oakland. Others live in Alameda and other near-by cities. The only difficulty we have experienced is that we are located about eight city blocks from the nearest car line, and the street car company gets the revenue anyhow, and they do not see their way clear to running a branch line down to our plant. That fact would probably keep some men from working in our yard, owing to the long walk to and from the street car line.

Senator NELSON. Could you not build and operate yourselves a branch line from the street car line to your plant?

Mr. ANDERSON. The question is whether it would pay us to put that investment in a street car line. The matter has never been discussed from that angle.

The CHAIRMAN. In a general way, what is the situation with regard to labor?

Mr. ANDERSON. Well, the labor situation is such that we do not get the maximum output from the men, due to the fact of there having been continued raises in wages from time to time on the Pacific coast, which has had a demoralizing effect upon the workers. Prior to our labor troubles out there last fall we were getting a fairly good day's work from our pieceworkers; those to whom we were

paying a piece price. They were satisfied, apparently, and we we satisfied.

The CHAIRMAN. What did they earn?

Mr. ANDERSON. A riveter earned an average of approximately a day, or a maximum of $7.92 a day. That was the maximum whi they themselves placed upon the amount which they would produ

Senator NELSON. What was the average per man?

Mr. ANDERSON. $6.75 or $7 for the piecework.

Senator NELSON. That is what I mean.

Mr. ANDERSON. The day worker works by a scale set by t union at the time.

Senator NELSON. What does the day worker receive at the prese time—the average?

Mr. ANDERSON. There is no average. It is a rate set at the prese time by the wage-adjustment board. It is $5.80 at the present tim at that time it was $4.25.

Senator NELSON. You spoke of labor troubles. What were the labor troubles you had? Describe them.

Mr. ANDERSON. There was existing an agreement between t California Metal Trades Association and the Iron Trades Coun The California Metal Trades Association is the employers' assoc tion and the Iron Trades Council is organized labor. That agreeme expired in September, on the 15th of September, at which time t men went on strike for, approximately, 50 per cent increase in wag

Senator NELSON. How long did that strike last?

Mr. ANDERSON. Fifteen days.

Senator NELSON. How was it finally adjusted?

Mr. ANDERSON. It was adjusted on a tentative agreement th they would come back to work pending such time as the wa adjustment board might come from Washington and settle t conditions permanently. And the men did not accept the agr ment, but merely worked on the basis that they were to recei retroactive money dating from the time they came back to work, whatever rates might be fixed by the wage-adjustment board.

The CHAIRMAN. With regard to the piecework, how many rive were ordinarily driven, and how many could a man drive withou overworking?

Mr. ANDERSON. The amount they would drive would vary accordin to the price of the riveting; riveting on the different parts of the bo takes different prices; and they would set a limit for themselves o $18 for the gang of riveters on the shell and $16 for the gang on th inside.

Senator NELSON. A gang would consist of three men, would it?

Mr. ANDERSON. Of three men, yes, sir; and those limits they woul work to. Ordinarily it takes 400 shell rivets for a gang to make $1 and sometimes, where they have smaller rivets, or larger rivets, takes more or less, as the case may be; they may make $18.

Senator NELSON. And what has been the result since the increa in pay?

Mr. ANDERSON. The result has been that we complained to th labor people that the men were not giving us as good a day's wo as they gave prior to the labor troubles. A committee of the me called on us in the office, and they said, "Well, you have raised th wages of the day workers, and have not raised the rates of the piec workers."

Well, they practically agreed that our piecework schedule was fair; in most cases it was better than that in neighboring plants; and in most cases we got them to go back to piecework, inducing them to lift this limit, and make whatever they could.

The result for a few days was that they did that, and some of the gang made as high as $25 a day. But it was only a short period before they came back and demanded that this limit be placed back again. The suggestion was made at the time that there was fear that if they made too much, we would reduce the prices; although there was no occasion ever given for them to suspect that.

The CHAIRMAN. Well, is that the situation now?

Mr. ANDERSON. The situation now is just the same, yes, sir; although the daily rate has been raised practically 50 per cent over what the rate was before.

Senator NELSON. That was done by the wage adjustment board, was it not?

Mr. ANDERSON. Yes, sir.

Senator NELSON. How much did they raise it?

Mr. ANDERSON. They made several raises from time to time, and it has now gone up to $5.80, from $0.25; so you can see it is more than 50 per cent increase.

Senator NELSON. Was that wage adjustment board a part of the Shipping Board?

Mr. ANDERSON. The wage adjustment board, I believe, was appointed either by the Shipping Board or by the President; I am not certain. I know there were representatives of all sides on that board; I do not exactly know the origin of the board.

Senator VARDAMAN. You say that the reason they assigned for putting a limit on the piecework was that they were making so much that you would insist upon reducing wages.

Mr. ANDERSON. That was only suggested. They did not give anything as a direct cause; that was given as a suggestion.

Senator VARDAMAN. By the laboring men themselves?

Mr. ANDERSON. By the laboring men themselves; yes, sir. They are so strict with this limit that men who have made more than the limit—their piecework tags have been subject to inspection by the other members of the organization, and there have been various threats made to them regarding their standing in the organization, and threats of fines if they persisted in——

Senator NELSON (interposing). Working too much?

Mr. ANDERSON. Working too much

Senator VARDAMAN. Did you give them assurance that they would not be penalized if they did that?

Mr. ANDERSON. Only verbally; yes, sir.

Senator BANKHEAD. Did I understand you correctly to say that the day wages of your men have been raised from $4.25 to $5.60?

Mr. ANDERSON. To $5.80.

Senator BANKHEAD. Do you get more efficient labor or better results at the higher rate?

Mr. ANDERSON. No, sir; we do not get as good results.

Senator BANKHEAD. How do you account for that?

Mr. ANDERSON. Simply because in previous times when wages were less, when day rates were less, there was an inducement for a man to do piecework, inasmuch as he could make $5.80 a day without

overexerting himself on that kind of work. Now that he gets $ a day anyhow, without regard to the amount of work he does, whe he drives one rivet or drives 100 rivets, he gets the $5.80 anyl there is not that inducement.

Senator JOHNSON. What times are you comparing, please?

Mr. ANDERSON. September and January.

Senator BANKHEAD. I do not exactly get the point; you were ing $4.25 at one time, were you?

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. That rate has been raised?

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. Now, what labor did you employ at time? What class of labor did you pay $4.25 a day?

Mr. ANDERSON. Riveters and calkers.

Senator BANKHEAD. Any others?

Mr. ANDERSON. Ship fitters and machinists.

Senator BANKHEAD. That was the rate that they were paid, average rate to those people?

Mr. ANDERSON. No, sir; that was the scale.

Senator BANKHEAD. That was the scale for those people?

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. For all of those different classes of work

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. Now, the rate has gone up to $5.80 a da

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. For all of those classes?

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. Calkers?

Mr. ANDERSON. Calkers, machinists, riveters, and ship fitters.

Senator BANKHEAD. Do you call all of that piecework?

Mr. ANDERSON. No, sir; we are speaking of riveters——

Senator BANKHEAD (interposing). That is what I want to get Now, you say when you paid $4.25 for that character of work, got as much work, or more work, than you do now, when you $5.80?

Mr. ANDERSON. Yes, sir.

Senator HARDING. Does the $5.80 include the war premium?

Mr. ANDERSON. The $5.80 is now a part of the permanent rate

Senator NELSON. That would make it more than the $5.80, w it not?

Mr. ANDERSON. No; the $5.80 includes the war premium, w became effective February 1.

Senator BANKHEAD. You do not call it a war premium; you c a bonus, do you not?

Mr. ANDERSON. We called it a war premium prior to Februa and now we call it a day rate.

Senator BANKHEAD. Why did you add that amount—to incr the rates?

Mr. ANDERSON. We did not add it. It was done by the Emerg Board, or by the Fleet Corporation, one or the other. I know it a tendency—to use a slang expression—to "raise the dickens" us out there.

Senator VARDAMAN. Well, the purpose of it was to expedite work?

Senator BANKHEAD. The result of all this is, as I understand you, that the higher the rate of wages that is paid, the less work you get?

Mr. ANDERSON. Yes, sir; because piecework has been discouraged.

The CHAIRMAN. That is because piecework has been discouraged, and it was by piecework that you got the most accomplished?

Mr. ANDERSON. Yes, sir.

Senator NELSON. No. But let me ask you this: How does your daywork now compare with the daywork under the old wages, as to efficiency?

Mr. ANDERSON. The daywork runs now about the same as it was under the old wages, because of the fact that a man has to make so much more to make piecework than he did before, due to the fact that the day wages have been raised to that point that men will run to ordinarily for a day now, when formerly they would have gotten piecework.

Senator NELSON. I mean your day workers now—do they turn out as much work as the day workers did before the wages were raised?

Mr. ANDERSON. On a general average they do; yes, sir.

Senator BANKHEAD. How many hours a day did you work on the old scale?

Mr. ANDERSON. Eight hours.

Senator BANKHEAD. How many hours did you get in a week?

Mr. ANDERSON. Forty-eight hours.

Senator BANKHEAD. They worked six days a week then, did they?

Mr. ANDERSON. Yes, sir; six eight-hour days?

Senator BANKHEAD. Always?

Mr. ANDERSON. Yes, sir; excepting on days when overtime was worked.

Senator NELSON. Do you work overtime very much?

Mr. ANDERSON. Yes, sir.

Senator NELSON. How much do you pay for overtime?

Mr. ANDERSON. We paid time and a half until February 1, and we pay double time now.

Senator NELSON. You pay double time now?

Mr. ANDERSON. Yes, sir.

Senator NELSON. Is that the decision of the Wage Adjustment Board?

Mr. ANDERSON. Yes, sir.

Senator NELSON. They raised the wages about 50 per cent, and then prescribed double time time for overtime work?

Mr. ANDERSON. Yes, sir; and they asked us to work double time on hulls in order to increase production.

The CHAIRMAN. You say you get less piecework than you ever did before?

Mr. ANDERSON. Yes, sir; we got 50 per cent piecework before, and now it does not run as high as 30 per cent.

Senator NELSON. Well, what effect has all this change had upon the aggregate amount of your output? Has it increased, or was it diminished?

Mr. ANDERSON. The plant is in such a transitory stage that it is hard to say. We are adding to the plant, and adding men so much, that I could hardly give a fair answer on that point, Senator.

Senator VARDAMAN. Who is paying the expenses of the enlargement of your plant, the Government?

Mr. ANDERSON. The Fleet Corporation, I believe. I am not fami iar with the financial details of the company. I am an operatir man, not a financial man, and I could not answer that correctly.

Senator VARDAMAN. But all those additional expenses are borr by the Fleet Corporation?

Mr. ANDERSON. Yes, sir.

Senator VARDAMAN. Well, it is not a matter of very much concei to you then, is it, as to how much it costs?

Mr. ANDERSON. It is, because we are anxious to put the ships oı at as cheap a price as we can. We are citizens——

Senator JOHNSON (interposing). What does your contract provid Does it provide for a specific rate, or a percentage of the cost?

Mr. ANDERSON. At the present time we have three distinct kin of contract.

Senator JOHNSON. Well, eliminate the commandeered ships f a moment. In the new contract that you have received, do the provide for a specific price per ton?

Mr. ANDERSON. The latest contract was on a cost plus basis.

Senator JOHNSON. Cost plus?

Mr. ANDERSON. Yes, sir.

Senator JOHNSON. Cost plus what?

Mr. ANDERSON. Plus 10 per cent profit and for overhead, and fo depreciation.

Senator JOHNSON. The contracts prior to that were on what basis please?

Mr. ANDERSON. We have some on a purchase and sale basis And the second contract—I am not certain just what the condition of that were. As I said before, I am not a financial man, and I d not know what the details of the office are regarding contracts.

Senator CALDER. Please tell the committee exactly the price o the last contract—whether so much per ton, or so much for the ship or what was it?

Mr. ANDERSON. I could not answer that question, Senator. I hav the data in my valise, if you would like me to look it up; but I coul not say offhand.

Senator BANKHEAD. Under the terms of your last contract, a I understand, the Government pays for the labor?

Mr. ANDERSON. Yes.

Senator BANKHEAD. It pays for the material, pays for the buildin of the yard and whatever expenses are attached to that, and then i allows you 10 per cent plus for profit?

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. Therefore it does not make much differenc to you what the labor cost, or what the material costs, does it?

Mr. ANDERSON. That is not the point.

Senator BANKHEAD. That is one point.

Mr. ANDERSON. We want to build ships and get them out.

Senator BANKHEAD. That is not the question, I say, it does no make much difference to you what the labor costs you.

Senator NELSON. But if the high price of labor diminishes th efficiency, then it has a bearing on the output.

Senator BANKHEAD. He has already said that.

Mr. ANDERSON. I have kept a very accurate detailed accou of the labor conditions in the past; and I am more familiar wi

that than with any other detail of the work. And what brought me back to Washington was that Chairman Hurley, of the Shipping Board, sent for me, so that he might become more familiar with the situation out there. That brought me back to Washington; I did not come here to complain about conditions at all, Senator.

Senator BANKHEAD. I understand that; but the question here is: The Shipping Board is paying for the labor and it is paying for the material, and is paying all other expenses, and then you get 10 per cent profit on that; is that correct?

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. Now, the question that I wanted you to answer was, what inducement is there for you or your company to hold down the expenses of the building of those ships to a figure at which it could be properly done? It does not make any difference to you what these things cost, inasmuch as you get your 10 per cent just the same, does it?

Mr. ANDERSON. The point is that we are anxious to build these ships as quickly as we can, and as cheaply as we can.

Senator VARDAMAN. But, as a matter of fact, the larger the expenses the greater will be your profits?

Mr. ANDERSON. Yes; but, as I say, we have three different kinds of contracts, and a man might be working on a boat being built on the one contract to-day and work on a boat under a different contract to-morrow.

Senator VARDAMAN. What three types of contract have you?

Mr. ANDERSON. There are three different types. I am not in a position to explain to you what they are without referring to them.

Senator VARDAMAN. Three different types that you are building for the Government?

Mr. ANDERSON. Yes, sir.

Senator VARDAMAN. Three different types of contracts?

Mr. ANDERSON. Yes, sir; they have been taken at different times.

Senator VARDAMAN. Well, what proportion of the contracts are different from the one that you described in answer to Senator Bankhead?

Mr. ANDERSON. We have not started yet to build under that contract at all.

Senator VARDAMAN. How many ships have you under that contract?

Mr. ANDERSON. Six.

Senator VARDAMAN. How many have you under the other contract?

Mr. ANDERSON. Ten under one and ten under another, I believe.

Senator VARDAMAN. Now, what is the contract for the first 10? What do you get for those ships?

Mr. ANDERSON. That is a purchase and sale.

Senator VARDAMAN. It is so much for a completed ship?

Mr. ANDERSON. I believe so.

Senator VARDAMAN. There is no bonus, no lagniappe, or anything of that kind?

Mr. ANDERSON. If it is completed ahead of time, there is a bonus. You are getting me involved in the question of finances, and as I say, I am not a financial man.

Senator VARDAMAN. Well, of course, we do not want you to talk about what you do not understand.

Senator JOHNSON. Do you know whether or not your company building any ships for the Government at a specific price per ton?

Mr. ANDERSON. I could not answer that yes or no, because I wou have to refer to my contracts, which I have with me.

Senator JONES. When was this cost-plus contract entered into?

Mr. ANDERSON. When?

Senator JONES. Yes.

Mr. ANDERSON. The 30th or 31st day of December, I believe.

Senator NELSON. This last December?

Mr. ANDERSON. Yes, sir.

Senator NELSON. That is the last contract, is it?

Mr. ANDERSON. Yes, sir.

Senator NELSON. How many commandeered ships have you l in the yard, or on the stocks?

Mr. ANDERSON. Four.

Senator NELSON. Four that you are working on now?

Mr. ANDERSON. Yes, sir; we were building them for individua and they were commandeered by the Emergency Fleet Corporatic

Senator JONES. Do you know that this contract that you call cost-plus contract is similar to other contracts that the Governme has made on the cost-plus basis?

Mr. ANDERSON. Yes, sir; I assume so, from having— —

Senator JONES (interposing). Well, I hope you will not assum with reference to this matter. I want you to state what you kno and the reason I say that is because the Shipping Board officials ha said that they did not enter into that kind of a contract, and so wanted to see whether they have changed their policy with referen to that. Now, do you know the terms of this cost-plus contract?

Mr. ANDERSON. I do not have them in my mind, no, sir; I woul have to refer to the contracts.

Senator JONES. Then you do not know whether it is the ordina cost-plus contract or not?

Mr. ANDERSON. No; I do not. I am not a contract man.

Senator JONES. That is the reason I asked you, in view of wh the officials of the Shipping Board have stated before this con mittee; that is all.

Mr. ANDERSON. Yes, sir.

Senator CALDER. I think perhaps those last ships you are buildi are a little different type from the others, are they not?

Mr. ANDERSON. Yes, sir; they are tankers.

Senator CALDER. Perhaps that might account for the fact th they are being built on the cost-plus basis.

Senator JOHNSON. How many have you under construction?

Mr. ANDERSON. We have five on the ways and two in course construction.

Senator JOHNSON. How many have you completed in the la year?

Mr. ANDERSON. Two completed and two in the course of co struction.

Senator HARDING. You say that the Government is furnishi money for the building of those new ways?

Mr. ANDERSON. They are assisting.

Senator HARDING. Does the Government advance you the mon or does it pay some of the expenses?

Mr. ANDERSON. They advance some of the money from time to time.

Senator HARDING. They merely loan you the money; is that it?

Mr. ANDERSON. As I said before, I do not know the financial arrangements of the company. I do not know what those are. I am not in a position to speak intelligently on that subject.

The CHAIRMAN. You say you have not started on this cost-plus contract yet?

Mr. ANDERSON. No, sir.

The CHAIRMAN. And that is for tankers?

Mr. ANDERSON. Yes, sir.

Senator NELSON. There are 26 ships, then, that you have under contract in all?

Mr. ANDERSON. Yes, sir.

Senator NELSON. And how many of them are completed—including commandeered ships; how many in all?

Mr. ANDERSON. Well, there are three that have been completed; three that are in the water, nearing completion——

Senator NELSON (interposing). They are commandeered?

Mr. ANDERSON. Yes, sir; and two left on the ways.

Senator NELSON. That makes eight, then, of the commandeered ships?

Mr. ANDERSON. Yes, sir.

Senator NELSON. Three are in commission, three are on the water, and two are getting ready?

Mr. ANDERSON. Yes, sir.

Senator NELSON. Then, outside of that you have how many under contract—26?

Mr. ANDERSON. No; there are 16 outside of that.

Senator NELSON. Sixteen outside of that?

Mr. ANDERSON. Yes—wait just a minute; there may be 26. I believe there are 26, in addition to those.

Senator NELSON. How many?

Mr. ANDERSON. Twenty-six in addition to those.

Senator NELSON. That is what I understand—26. I understood you to say that this last contract was for 10, was it not?

Mr. ANDERSON. Yes, sir; and then six tankers.

Senator HARDING. How near are you coming to delivering according to expectations?

Mr. ANDERSON. We are delivering according to dates.

Senator HARDING. Are you delivering your requisitioned ships as rapidly as you promised to finish them?

Mr. ANDERSON. I presume we are. I have heard no complaint on that score; I have not got the dates in my mind, as to what the delivery dates are.

Senator HARDING. And you will meet your dates of delivery in accordance with the terms agreed on with the Fleet Corporation?

Mr. ANDERSON. Yes, sir.

Senator RANSDELL. I understood you to say, Mr. Anderson, that your men have received quite an increase in wages—about 50 per cent?

Mr. ANDERSON. Yes, sir.

Senator RANSDELL. From $4.25 to $5.80 a day?

Mr. ANDERSON. Yes, sir; it is more than 50 per cent.

Senator RANSDELL. No; it is less than 50 per cent.

Mr. ANDERSON. It is from $4.25 to $5.80.

Senator RANSDELL. Fifty per cent of $4.25 would be $2.12½.

Mr. ANDERSON. That is correct.

Senator RANSDELL. And therefore it is about a 35 per cent increas instead of 50 per cent.

Mr. ANDERSON. Yes; that is right.

Senator SHERMAN. You want to stay in business after the war over, do you not?

Mr. ANDERSON. Yes, sir.

Senator SHERMAN. In your terms of employment and your servic the more they depart from the normal, the more difficult it will for you to readjust wages when peace comes and the Governme releases your yard; you do have some interest, then, do you n in seeing that you depart from that normal condition just as lit as possible?

Mr. ANDERSON. Yes, sir. One of the conditions that are most di tressing on the Pacific coast regarding labor conditions is the fa that a permanent, established wage should be established on the coa that would affect all of the coast and in so doing it would stop transitory habits of the men. Those practices are very costly to th companies and to the Government. Every time a man is hired represents an investment of so much labor and the material that h might spoil while he is learning. And to have men starting in on plant and immediately move to another plant as soon as they ar able to handle a tool, because they can get higher wages at th second plant, has broken down the apprentice system, and it simpl promotes that transitory spirit where men become very independen and do not care what they do in one yard; they know if they quit i one yard to-day they can be employed in another yard in that vi cinity the same day.

Senator SHERMAN. It makes it correspondingly difficult——

Mr. ANDERSON (interposing). If a minimum hiring rate were estab lished or a maximum hiring rate were established in all the yards u and down the coast, it would largely tend to stop that condition.

Senator NELSON. Well, is there not a uniform rate now along th coast in the yards that are working for the Government?

Mr. ANDERSON. I understand that some of the yards are payin the minimum rate, but they are paying on a piecework basis payin a lot of men on the piecework basis; employing them on a piecewor basis; guaranteeing them so much per day, which amounts to piece work rates.

Senator NELSON. Yes; and that is really more than this Govern ment rate, is it not——

Mr. ANDERSON. Yes.

Senator NELSON (continuing). In this scale of wages that yo have described?

Mr. ANDERSON. About time and a half, yes, sir; it amounts t about $8 a day.

Senator NELSON. That is what they are paying. Well, nearly a the yards on the coast are engaged in Government work, are they not

Mr. ANDERSON. I guess they all are.

Senator NELSON. They all are. Then this trouble that you ta about rose out of the fact that some of the yards are not living u to that rate that was fixed?

Mr. ANDERSON. Yes, sir.

Senator NELSON. They ought to be disciplined, ought they not?

Mr. ANDERSON. I should judge so.

Senator NELSON. The yards, I mean. [Laughter.]

Mr. ANDERSON. Of course, you can not blame a man for getting all he can; if he can not get it at one place, and can at another, you can not blame. But it breaks down your apprentice system, because you invest so much in a man to learn the business at one plant, and he leaves that plant before he is really capable, and hires in another plant as a full-fledged journeyman.

Senator NELSON. Are your yards out there open-shop yards, or are they union yards?

Mr. ANDERSON. All that I know anything about are union yards; our yard is a union yard.

Senator NELSON. You can not employ anything but union men?

Mr. ANDERSON. We employ them, but it is a very short time before they become members of the organization; they are invited and told to join.

Senator NELSON. Suppose they do not join—what then?

Mr. ANDERSON. Different ones have told me from time to time that they would have to quit, because their conscience would not permit them to join an organization of that kind, and they would have to leave us, and they have quit.

Senator NELSON. Yes—for conscience's sake?

Mr. ANDERSON. I have not inquired any further as to just what threats had been made against them, not wishing to become involved in the controversies.

The CHAIRMAN. The piecework costs more money, but you accomplish more by it than by the day-wage system?

Mr. ANDERSON. It costs less money per rivet, because you get so much more for your money.

The CHAIRMAN. You pay higher wages for piecework, usually, but you get more results?

Mr. ANDERSON. Yes, sir; you get so much more results that it pays——

Senator NELSON (interposing). Practically it is cheaper, judging from the results?

Mr. ANDERSON. Absolutely.

Senator JOHNSON. You have been speaking of the men who have demanded all they could get in the matter of wages. Do you know any manufacturers who have not asked all they could get, and taken all they could get, for the manufacture of ships?

Mr. ANDERSON. I am not familiar with the mechanical details. I can not answer that question.

Senator VARDAMAN. Well, do you not know as much about the details as the manufacturers in that regard as you do of the private individuals?

Mr. ANDERSON. I have not come in contact with many manufacturers, Senator, in my business.

Senator VARDAMAN. You are employed by a manufacturer, are you not?

Senator NELSON. Perhaps the workmen think they ought to have cost-plus contracts too. [Laughter.]

Mr. ANDERSON. We are willing to pay it to them—in fact, we hav been paying it to them. The Wage Adjustment Board ordered 10 per cent increase on the minimum rate, and we gave the piec worker a 10 per cent increase on his maximum earnings, to encourag him in piecework. We stood that expense ourselves; we stood tha and the 10 per cent that the board allowed, ourselves.

Senator BANKHEAD. I understood you to say awhile ago that yo employed nonunion men, but that immediately thereafter, or soc thereafter, they were induced to join the unions, by persuasion, o otherwise; is that correct?

Mr. ANDERSON. Yes, sir.

Senator BANKHEAD. Suppose, for any reason, you discharge union man; what happens?

Mr. ANDERSON. We are waited upon by a committee, and by th business agent of the union; and sometimes we have as many as fiv or six visits, and are requested to reinstate the man; and oftentime various threats are made if the man is not reinstated. Only the las week that I was in the shop a disloyal employee was laid off; an the business agent made no less than five visits to the plant, takin up the time, approximately of hours each day, of a couple of execu tives of the company; and finally, a week ago Saturday, we wer waited on by a committee of the men from the yards, who asked fo reinstatement of the man; and when we flatly refused to reinstat him we were asked how we would like to get along without tha particular class of labor in the yard—just in an insinuating way— not a strike threat, but an insinuating remark: it was probably sai more for effect than anything else.

Senator JONES. You say this was a disloyal man whom you dis charged. Do you mean disloyal to the Government or disloyal t you or your company?

Mr. ANDERSON. Well, we think both. If they are disloyal in th yard—if they are disloyal to the company, they are disloyal to th Government, because our work is all Government work.

Senator JONES. That is the reason you would class him as dis loyal to the Government, because you consider him disloyal to you company?

Mr. ANDERSON. Yes, sir.

Senator JONES. Outside of that you had no evidence or no ground for suspecting his loyalty to the Government?

Mr. ANDERSON. There was sufficient grounds for suspicion, Sen ator, to warrant our releasing him.

Senator JONES. That is, suspicion of his disloyalty to the Gov ernment?

Mr. ANDERSON. Yes, sir.

Senator JONES. Did you point this out to that committee tha called on you?

Mr. ANDERSON. We pointed it out to the business agent.

Senator JONES. And what did he have to say to that?

Mr. ANDERSON. Simply that it was only done as a passing propo sition, and that it was not done with any spirit or any feeling that th man was disloyal; and we let it go at that, taking his word for it.

Senator SHERMAN. Let me read to you, with the chairman's pe mission, an article that has a bearing on that.

Senator JONES. Excuse me just a moment, Senator Sherman, and let me finish this line of questions. Was this man restored to his position, Mr. Anderson?

Mr. ANDERSON. No; he was not.

Senator JONES. He was not restored and is not in the position now?

Mr. ANDERSON. Not that I know of—unless he has come back since I left.

Senator JONES. Well, then, they accepted finally your decision in the matter?

Mr. ANDERSON. That was the last of that matter until I left the plant. I left the plant the same afternoon, or the following day.

Senator JONES. Well, if anything serious had happened, you would have known of it, would you not?

Mr. ANDERSON. No; it was not anything really serious——

Senator JONES (interposing). I mean if anything serious had happened as a result of your refusal to reinstate the man?

Mr. ANDERSON. Yes, sir; if there had been a strike I would have heard of it, surely.

Senator SHERMAN. I would like to read part 2 of paragraph 3, of section 4 of the English munitions act of July, 1915, as amended July 22, 1916, which is as follows:

> Any rule, practice, or custom, not having the force of law, which tends to restrict product or employment, shall be suspended in the establishment. And if induced, or attempts to induce any other person, whether any particular person, or generally, to refuse to comply or continue to comply with such rule, practice, or custom, that person shall be guilty of an offense under this act.

What would you think about such a regulation made by law in this country?

Mr. ANDERSON. It looks, Senator, as though that were a very logical solution of the problem, whereby men would be permitted to earn what they can—to make what they can. We are perfectly willing to pay a man all that he will earn, if he will only produce, and——

Senator SHERMAN (interposing). This is purely a war regulation, of course.

Mr. ANDERSON. A war measure; yes, sir. It looks as though that would be a very logical solution of the difficulties that all shipyards are experiencing at the present time regarding restrictive output. I understand that in some of the plants men are permitted to go the limit; they are permitted to make all they can. But in our plant I know that the men are not permitted to make any more than a certain amount.

Senator NELSON. They can not do what they would like to do, or what they could do?

Mr. ANDERSON. Some of them would like to make more money; in fact some of them do make more; and it is necessary for us to hand them their slips for their earnings in secret, so that their fellow workmen will not see how much they are earning.

Senator NELSON. Yes.

Mr. ANDERSON. There are a few loyal employees, who feel that they want to do all that they possibly can at this time, and they are loyal in that way, and they are exerting themselves.

Senator NELSON. And when you pay them for the extra work, you do it in secret?

Mr. ANDERSON. Yes; practically do it in secret.

Senator NELSON (continuing). In order to protect them against the other men?

Mr. ANDERSON. In order to protect them against being discovered.

Senator JONES. What proportion of the men do that?

Mr. ANDERSON. A very small proportion.

Senator JONES. Is it 1 per cent?

Mr. ANDERSON. About three gangs out of 135 gangs.

Senator VARDAMAN. Mr. Anderson, did you take that matter up with the labor people, or did any member of your company take it up and discuss it with them in a proper, patriotic way, and urge upon them the necessity for cooperation in this time of emergency? Has any effort of that kind been made by your company?

Mr. ANDERSON. I have spoken along those lines many times with the committees of the various shop organizations in our plant.

Senator VARDAMAN. I am not talking about the organizations; but have you called the laborers together and laid the facts before them—treated with them, not with their representatives, but with the mass of laborers themselves?

Mr. ANDERSON. No. That is practically impossible, unless we suspend operations for a sufficient time to call the men together to give them any such talk as that. The only way we can deal with them is through their representatives, and their representatives we expect to bring the matter before their meetings.

Senator VARDAMAN. Mr. Powell, of the Bethlehem Shipbuilding Corporation, was before the committee the other day, and his statement impressed me very much. He is a very bright young man, and he expressed the opinion that, if that were done in that way—if the employer appealed to the better side of the laborer's character—he would respond, and he had responded; if he were treated like a human being, like a fellow creature, there would be no trouble of that kind. Mr. Powell said that where employers had failed and the men had demanded exorbitant wages was often due to the fact that the manufaturers were getting such enormous prices that the men felt that they ought to have a share of the excessive profits.

Mr. ANDERSON. Well, we do not hesitate, Senator, to pay them all they will earn when they work piecework. We are willing to pay them all that they will earn, and the rates we pay them are agreed upon between themselves and us. We had their committee in, and submitted the piecework rates to a meeting of their organization, and it was adopted by them, and they were perfectly satisfied with the rates we paid.

Senator VARDAMAN. Well, if they could be convinced that their wages were not going to be cut down, or the day employment would not be lessened and their profits reduced by this piecework method that you have, I amagine that there would be no trouble about settling these differences with them at all: in other words, if they were treated more as American citizens, as human beings.

Mr. ANDERSON. Of course, you understand that many of the men of the different classes of labor that we have to deal with in the shipyards are not Americans. There is quite a foreign element.

Senator JONES. They can talk and understand English, can they not?

Mr. ANDERSON. A majority of them?

Senator JONES. Yes, a majority of them?

Mr. ANDERSON. Yes, sir.

Senator JOHNSON. Does your company belong to any particular nployers' organization in San Francisco?

Mr. ANDERSON. We are members of the California Metal Trades ssociation—inactive members of the association.

Senator JOHNSON. Are they members of the N. A. M.

Mr. ANDERSON. I am certain that they are not; I have never eard of any suspicion that they were connected with that organiza-on.

Senator JOHNSON. Are they members of the San Francisco Cham-er of Commerce?

Mr. ANDERSON. I do not think so. They are members of the Oak-nd Chamber of Commerce. I do not think they are members of ne San Francisco Chamber of Commerce.

The CHAIRMAN. Has there been any progress made toward bring-ng about this uniform wage scale on the Pacific Coast that you have uggested?

Mr. ANDERSON. The wage adjustment board has made its rulings egarding wages, and regarding the wages that the board will pay: ut there has never been anything done regarding the piecework; nd the man can be hired at the minimum rate and guaranteed the piecework every day, and that is what causes the trouble; if the piecework wages were regulated the same as the day wages are regulated, conditions would be very different. It is the piecework that is building the ships. They are the loyal men that are building the ships, and if their wages were regulated in the same way as the day-laborer's wages are regulated, I think much of that trouble would be removed.

The CHAIRMAN. Could not efforts be made to stop that practice?

Mr. ANDERSON. We are starting to do something along that line now.

Senator NELSON. Could not all of these questions be controlled, on the ground that those men are working on Government contracts?

Mr. ANDERSON. Yes, sir; I have been discussing that with the representatives of the Fleet Corporation.

Senator NELSON. It seems to me that the Wage Adjustment Board would have absolute control of that matter, just as they do in the case of day wages.

The CHAIRMAN. I believe that is all, Mr. Anderson.

Senator SHERMAN. It might be well, in view of what Senator Vardaman has said, for me to read an extract that I have here; I want the witness to hear it. With the chairman's permission, I would like to read from Lloyd-George's speech on Christmas night, 1915, addressed to the Trades Union Congress of the British Workmen. I will not read it all, He said, among other things:

> Either we must tell the soldiers that we are sorry we can not get the guns to enable hem to win in 1916, owing to the trades-union regulations, or we must tell them that f they manage to hold out for another year perhaps American workmen will help us et a sufficient supply for 1917. I can not return to Parliament and report to the House f Commons and to the British Army that skilled workmen will not suspend their rules save their fellow countrymen's lives on the battle field.

This speech was delivered on Christmas day, 1915. The amenment to the munitions act of 1915 was made July 22, 1916, following loyd-George's appeal to the trades-unions. So that this pena'

tion added to the law evidently was in view of the fact that they did not heed his request. It might be well, I was going to suggest, to go to the men in your employ and talk to them and appeal to their patriotism, as Senator Vardaman has suggested. But evidently Lloyd-George's appeal to the men in the Trades Congress in England failed, because the penal section was added to the munitions act in 1916, following his speech on Christmas night in 1916.

Mr. ANDERSON. I think after an appeal of that kind is made, if it proves unsuccessful, a law of that kind would be a very good thing in this country.

Senator SHERMAN. Try the appeal to their patrotism first?

Mr. ANDERSON. Yes, sir; try the appeal first.

Senator SHERMAN. But we have to have the work done.

The CHAIRMAN. As Mr. Anderson was here from the Pacific coast, and as he is connected with a large shipyard out there, I thought he might have something of value to offer to the committee, and therefore I asked him to appear.

Now that Senator Calder has arrived, I will ask Admiral Harris to proceed with his statement.

Will you state your name and present occupation, Admiral Harris?

STATEMENT OF ADMIRAL FREDERIC R. HARRIS, UNITED STATES NAVY.

Admiral HARRIS. My name is Frederic R. Harris. I am in the Corps of Civil Engineers in the United States Navy, with the rank of rear admiral. My present duty is at the navy yard at Norfolk, Va.

The CHAIRMAN. Are you a graduate of Annapolis?

Admiral HARRIS. No, sir.

The CHAIRMAN. You are connected in what capacity with the Navy? And if you have had experience in naval construction, please state what that has been.

Admiral HARRIS. I entered the Navy from civil life. I am a graduate of Stevens' Institute of Technology. My experience has been largely in construction work, on water-front work: that is, dry-docks, shops, terminals, wharves, harbor work, and, in connection with that, floating cranes and floating dry docks; shipbuilding ways; shipbuilding shops; nothing directly connected with ship construction in the Navy, although I have been around and in close touch with ships and shipbuilding for my entire professional career.

The CHAIRMAN. Where have you done this work that you mention?

Admiral HARRIS. Where have I done it?

The CHAIRMAN. Yes.

Admiral HARRIS. I have done it from the day I graduated. I graduated in 1896, and entered the Navy in 1903.

Senator NELSON. Well, you are what they call a civil engineer in the Navy, are you not?

Admiral HARRIS. Yes, sir. I am in the Corps of Civil Engineers of the Navy. It is a special corps of staff officers.

Senator CALDER. Admiral Harris, you have planned and supervised the building of some of the most important dry docks for the Navy Department, have you?

Admiral HARRIS. Yes, sir; I guess I have had to do with nearly all of them.

Senator CALDER. You have planned and supervised the building of floating cranes for the department?

Admiral HARRIS. Yes, sir.

Senator CALDER. You have planned and supervised the building of many machine shops for the Navy Department?

Admiral HARRIS. Yes, sir.

Senator CALDER. In other words, you have had supervision of equipment generally for the navy yards in the United States?

Admiral HARRIS. Yes, sir.

Senator CALDER. And since the war with Germany began you have had to do with planning and supervising the building of practically all the Navy cantonments?

Admiral HARRIS. Well, everything of the Navy on shore; everything in public works, cantonments, hospitals, magazines, mine assembly plants, aeroplane factories, and the shipbuilding plants and shipbuilding ways at the various yards, dry docks, and everything in connection with the navy yards ashore, including the supervision of what we call outside plant construction. That is, the plants not directly Government plants, in which the Government assisted the private owners in the completion of their plants, building them in whole or in part under various contracts.

Senator CALDER. And you have had charge of all these matters until you entered the service of the Shipping Board?

Admiral HARRIS. Yes. There was a period there of 10 days or two weeks, while I was still chief of bureau, and was acting also with the Shipping Board, before my resignation.

Senator CALDER. How did you come to go with the Shipping Board?

Admiral HARRIS. Well, there was some time before Admiral Capps actually resigned, when it was very well known that he was very likely to get out. I understood that his health was not very good. And I had been spoken to about going into the Shipping Board; I think Mr. Hurley asked the Secretary of the Navy to let me go; the Secretary did not approve of my going, and wanted me to stay where I was. And I talked to the Secretary about it, and told him that I wanted to go; that I thought my bureau work was pretty well organized, and I thought I could be more useful in the Shipping Board; that I had had a talk with Mr. Hurley, and that I would like to try it, because I thought I could be useful.

Senator CALDER. Under what conditions did you enter the service, admiral? Were you to succeed to the powers that were enjoyed by Admiral Capps?

Admiral HARRIS. Well, I understood from Mr. Hurley that there had been an amendment in the by-laws, and that Admiral Capps's powers were very much restricted by the by-laws as amended. And he explained that to me, even in connection with contracts, suggesting that they could change the by-laws again so that I could change contracts, as in conversation with me he had ascertained that I had done that in my bureau—that I had done that to expedite the construction of the work.

But I rather indicated that I did not care much about any changing back of the by-laws, because if they could change them under Admiral Capps they could change them under me; and I would prefer to go in there on more or less of an understanding that, if it worked well, they would change them to suit; if we did not work in harmony, there was

no use in changing them in advance and then having to change them back again. In other words, it seemed to be a case of trying to work harmoniously, and trying to carry out his ideas, as he was the chairman of the board; and if I oculd not do that, there was not any use in making any prearrangement as to what he would do, because he could change his mind.

Senator CALDER. Then when you entered the board you understood that you were working under the orders of Mr. Hurley?

Admiral HARRIS. There was never any question that he was the supreme authority, although he did explain Mr. Piez's presence by stating that he had known him a long time; that he was very busy with the work of the Shipping Board, conferences with the representatives of the allies and board meetings, and that Mr. Piez—he would delegate to him the principal executive authority, and that I would work under Mr. Piez, and that it would be advisable for Mr. Piez and me to get together and sort of size each other up personally; and I had two or three conferences with Mr. Piez before I indicated that I was willing to go in there.

And I should have said that my understanding with Mr. Piez as to everything was completely carried out; and I do not believe we ever had a misunderstanding about anything while I was there.

Senator CALDER. Before you entered the service of the Shipping Board, did you have an agreement as to your duties, and was that reduced to writing?

Admiral HARRIS. No, Senator; I had no agreement in writing; I never thought of such a thing; that would not do.

Senator CALDER. What I meant was, was there any exchange of understandings between you and Mr. Hurley as to your views on the shipping program?

Admiral HARRIS. Not with Mr. Hurley. Before I went in there, after my conference with Mr. Piez, I drew up—that is, before Admiral Capps went out I drew up a memorandum outlining everything that I thought was essential in the way of policy, organization, and so on. That I committed to writing and submitted to Mr. Piez. I did that with Mr. Piez because I had understood from Mr. Hurley that Mr. Piez was the real acting executive head of the Shipping Board: but that his decisions, so far as I was concerned, were final; if he wanted to consult with Mr. Hurley about it, that was his affair. I did draw up a memorandum and submit it to Mr. Piez.

Senator NELSON. Have you a copy of that memorandum?

Admiral HARRIS. Yes, sir: I have a copy of it.

Senator NELSON. Will you furnish us with a copy of it?

Admiral HARRIS. I will.

Senator NELSON. I would be glad if you would do so.

Admiral HARRIS. I do not think there is anything in it that is confidential. I will put that in; yes, sir.

(The memorandum referred to is here printed in full, as follows:)

MEMORANDUM RELATIVE TO BUSINESS, UNITED STATES EMERGENCY FLEET CORPORATION.

POLICY.

(*a*) The primary consideration shall be a most expeditious production of the maximum tonnage preferably along safe established lines of design. Wooden shipbuilding to be continued to the maximum capacity of proven established plants or yards.

Due economy to be exercised in the carrying out of (a) with a view to avoiding ulness and extravagance, but the monetary consideration to be secondary to itious maximum construction.

In construction the corporation is to confine itself to the expansion of existing dilding yards where an organization exists, or the expansion of shipbuilding zations. No new yards involving new organizations inexperienced in ship-ng to be encouraged; that is, no contracts to be placed with those not having or organizations experienced in shipbuilding.

Coordination of shipbuilders or contractors. Encouragement of their organiza-ito a single association with subdivisions, preferably geographically.

Close contact of the corporation with individual contractors to be had at all through the agency of such an association with offices and accredited repre-ives located in or near the corporation's main offices.

Coordination of labor interests, preferably through the officials of organized Conferences to be had with organized labor officials with a view to their aining close daily touch with the main office of the corporation.

On account of the congestion in the city of Washington, the lack of adequate space for expansion in the present building, the dearth of other accommodations cessary future expansion, the shortage of housing accommodations for employees, gh cost of rents and living expenses for employees, the difficulty in securing yees in Washington, and the necessary pressure from other departments, offices, divisions of the Government located in Washington and expanding therein, expansion will continue during the war, the principal working force of the ration should be located in some other city, preferably Philadelphia, that city practically in the heart of the shipbuilding industry and favorably located aphically for Atlantic coast shipbuilding interests. The first step should be to the Philadelphia office independent from the district office in that locality a ipal branch office with perhaps an assistant general manager in charge with a to eventually making this the principal working office of the corporation and taining merely an executive office in Washington, the vice president of the cor-ion and the general manager each spending eventually about three days a week is office. The administrative end of the corporation is undermanned and requires ivision and expansion. The growth of the personnel in the next few months asily double and treble that at present available. Accommodations should be diately found in Philadelphia with that end in view.

A branch office should be established on the west coast, preferably at San Fran-, with an assistant general manager in charge. The view expressed herein and e preceding subdivision (g) as regards Philadelphia is with a view to decentraliza-which in my opinion is essential to expedition. This decentralization must be npanied by the placing of broad authority restricting only as to policy in the s of district officers and assistant general managers.

ORGANIZATION.

An expansion of the organization is in my opinion necessary. The construction ion as at present constituted to be subdivided into (1) construction division, steel and requisition ships, (2) construction division of wooden ships, (3) technical design division, (4) machinery and mechanical division, the industrial service ion being separated from the construction division and operated as a separate ion. This division especially needs considerable strengthening and expansion ll be hereinafter commented upon under the caption of labor.

Under the construction division as at present there are two statistical branches g progress made on requisition and on new ships. There is also a statistical h under the industrial service division. I would recommend a separate division ce for statistics and progress. Reference will be made for the further need for nder the caption of labor.

The district organization, in accordance with what is given above, must be ened and strengthened, each district to be in charge of a district manager or or who shall have under him assistants or heads of departments representing ain activities or divisions, such as new steel and requisition ships, (2) wooden (3) machinery and mechanical, (4) industrial service, (5) shipyard plant, (6) ng and disbursing, (7) purchasing. The heads of the main divisions shall ond directly with the heads of district departments on business concerning divisions solely. The district manager or director to coordinate the work of the t and to report directly to the general manager or the assistant general manager.

LABOR.

(a) Compensation for labor on shipyard construction should be immediately placed upon the navy yard wage scale, contracts to be readjusted so that the increased cost by the raise in wages is to be borne by the corporation. In placing the scale of wages the same as the navy yard scale, it should be borne in mind that this will still leave labor employed upon work of the Fleet Corporation at a disadvantage as compared with labor employed in the navy yards, to the extent of 30 days' leave per year granted by statute, pay for holidays and other considerations of value, or on a percentage basis receiving what amounts to 14 per cent less than that received by employees of the Navy Department.

(b) There must undoubtedly be a great increase in the number of shipyard workmen in order to produce the tonnage required, but considerable increase in output and efficiency can be obtained from the present number of workers by some method which would secure more regular and continuous work from them. High pay such as is now being received is undoubtedly a necessary and equitable allowance considering the increased cost of living. This unfortunately applies principally to a workman with a family. Younger men without families, through the increased wage, undoubtedly in instances, are placed in the position of receiving more money than is actually required by them and the temptation is often to take time off during the week in order to spend and enjoy this additional pay. To increase efficiency in the output of the men now employed, I would suggest some arrangement for additional compensation for continuous time-service pay. If 56 hours per week is considered the proper and reasonable time, workers might receive a percentage increase in the pay where the time-card showed a continuous service over a period of weeks. I think the extra expense would be offset by the saving in cost.

(c) The corporation has already taken steps with a view to making shipyard employment desirable by exempting shipyard workers from the draft. I think a step further should be taken, namely, that all of those now drafted or serving in the Regular or National Army, who have had experience as skilled workers on ship work should be discharged from the Army on condition that they return to this trade. This would involve an Army census and some cooperation so that if men so discharged do not continue at the trade they will automatically be required to return to military service. It should be borne in mind that the return of men who had actually seen military service abroad or in cantonments under the conditions existing in the Army will stimulate patriotism and have a good effect upon the men at work in the plants.

(d) I further recommend the immediate issuing by the corporation of distinctive badges with recorded number for identification to each man employed in the construction of merchant shipping, this badge to be preferably issued after consultation with the Navy Department, with a view to having similar badges issued to navy-yard employees or shipyard employees on Navy work. The badges to be of value must be safely guarded, carefully distributed, and taken up when occasion requires by reason of discharge or change in location, and should be well advertised so that it may be recognized in connection with exemptions from draft so that the general public will feel that when worn by an individual this individual is performing war service.

(e) It will undoubtedly stimulate the patriotism of shipyard work and also encourage economy and thrift if some uniform system could be established to assist and induce them to subscribe to the Government war loan as issued from time to time.

(f) In addition to all of this undoubtedly the number of shipyard workmen must be increased many times. This has been frequently stated but unconvincingly, because it is not based on a complete statistical study and the facts, except in a general way, have not been clearly enough established to the leaders of organized labor so that they in turn could place them before the members of their organization. A study should be immediately made by all district managers or directors, investigating all plants under their supervision and reporting after a conference with contractors the number of men employed, the number of men at various rates that could be advantageously employed immediately and that will be required to operate the plants to capacity from month to month as the work progresses. Such forecasts, of course, will require revision from time to time, but they are better than nothing or a guess, and will permit of immediate efforts being taken to supply the shortage from similar or kindred trades not so active or essential to the prosecution of the war. These studies should be made with a view to present conditions or reasonable overtime work, but also should be made with a view to eventually coming back to an eight-hour basis. While this would be work for the industrial service division and the statistical division the industrial service division would also have to take in hand the question of distinctive badges, continuous time service pay, liberty bond subscriptions, and, perhaps, in connection with housing the encouragement of workmen's building and loan associations.

PUBLICITY.

In addition to this there is an active need for a broad publicity organization which would be largely concerned with general policy. The public should be taken into the confidence of the corporation and the truth told as to the present programs on shipbuilding and the prospects as to output. This division should be especially active in connection with information for shipyard workers, encouraging them in their efforts, making their work or trade a subject of public interest and their service heroic in the public eye by encouraging magazine articles and fiction in the same way as has been done in connection with the cowboy of the West and the pioneer of the Yukon. Such publicity service should include a district speaker service, entertainment and recreation service, in all of which the industrial service division should be active.

HOUSING FOR EMPLOYEES.

It is understood that studies are now being made with a view to providing housing facilities for workmen and employees in the vicinity of the plants where such are not available on account of their isolation, congestion, or for other reasons. Irrespective of this, both as to the cost and practicability of cooperating with landowners, communities, or financial interests, relief will only come from such source after some delay, about six months. Immediate steps should be taken in the meantime to improve transportation facilities to plants, such as extending trolley lines, putting on additional cars, restricting traffic during certain hours when shipyard employees will need all the capacity, and also the ability to commandeer houses. It is quite possible that in the vicinity of shipyard plants houses are available, now occupied by individuals whose presence in the vicinity of the plant is not required for the purposes of the Government. It is quite probable that legislation may be required to effect complete control of transportation and housing, and if this legislation could be secured expeditiously, it would be of the greatest importance.

Senator CALDER. Have you that memorandum with you, Admiral?

Admiral HARRIS. Yes; I have it with me.

Senator CALDER. Can you state to the committee in substance what it contains? If it is not very long you might read it now.

Senator JOHNSON. If it is not unduly lengthy I suggest that the admiral read it.

Admiral HARRIS. I do not know whether you would want me to read the whole of it; there are four or five sheets of it.

Senator NELSON. I am afraid we would not read it ourselves afterwards.

Admiral HARRIS. I will say that I submitted this memorandum to Mr. Piez, who took it home and kept it for several days, and then told me afterwards that he agreed with me on everything and that we would proceed on that basis. There was only one matter in it that he suggested I take up directly with Mr. Hurley; that was on the question of publicity or, as we called it, "patriotic service." That is, we wanted to appeal to the workmen who were already in the shipbuilding line, or those who might go into shipbuilding, to make them feel the work they were doing in shipbuilding, in turning out the tonnage, was just as important to the United States as the work that the soldiers were doing in the trenches and that the sailors were doing on board our naval vessels.

Senator JONES. Why did Mr. Piez think you ought to take that up with Mr. Hurley?

Admiral HARRIS. Because he thought that they might conflict, perhaps, with some ideas on the publicity that Mr. Hurley might have. In other words, this was something that had to be worked up.

Senator NELSON. Did he think it might conflict with Mr. Creel's work?

Admiral HARRIS. That I do not know. I do not think he did, because we mentioned Mr. Creel, and we rather expected that we could, by cooperation with Mr. Creel, have him, through the agency he had, help us a lot. It was not newspaper work; it was more in connection with magazines, short stories, moving-picture shows—something to make the man realize, which we did not think he did realize, that when he was driving rivets, he was doing just as much for the United States as when he was firing his rifle on the other side. That was a matter that I did take up directly with Mr. Hurley, at Mr. Piez's suggestion.

Senator NELSON. All this is familiar to you, Admiral. Could you not give us a brief outline of it without reading it, and then we will have it go into the record afterwards?

Admiral HARRIS. Yes, sir. On the question of policy I outlined eight subdivisions. Most of them are axiomatic. One was that the principal necessity was to turn out the maximum tonnage, and that while cost was important and we were not to waste the money, cost was secondary to the turnout.

Wooden-ship building was to be continued to the maximum capacity of proven established plants.

In construction, the corporation, as far as possible, to confine itself to the expansion of existing shipbuilding yards where an organization existed, or the expansion of the shipbuilding organization. No new yards, involving new organizations inexperienced in shipbuilding, to be encouraged. That is, no contracts to be placed with those not having plants or organizations experienced in shipbuilding.

Senator NELSON. What is the date of this?

Admiral HARRIS. This was not dated. My records show it was written on November 26. It was written through several days; two paragraphs were added after a conference with shipbuilders in Philadelphia, on Novembr 28.

The CHAIRMAN. 1917?

Admiral HARRIS. 1917. That was before Admiral Capps left, when I was working with the Shipping Board and knew I was going to succeed him.

Another thing was coordinating the work of shipbuilding contractors by encouraging the organizations which they had to combine into one organization with subdivisions.

The next item was coordination of the labor interests, preferably by cooperating with organized labor.

Another thing involved the decentralization of the organization. It appeared to me that too many details had to go to Washington for approval; that the office space available in Washington was too small, and that we were too congested. We could not expand; we could not work to advantage. When you get men too close together and too crowded and in the wrong atmosphere, they do not work as well as where they have more room to expand and are in an atmosphere closer to their work. My proposition was to decentralize, to expand, by opening two principal branch offices, with an assistant general manager in charge of each.

Senator NELSON. At what places?

Admiral HARRIS. One for the Atlantic coast, at Philadelphia, the other for the Pacific coast, at San Francisco.

Senator JONES. Did Mr. Piez agree to that?

Admiral HARRIS. I will say that the Philadelphia office idea was largely Mr. Piez's own idea. In our talk he had agreed to that decentralization. He seemed to think that Philadelphia perhaps was a good place; it was in more or less of a shipbuilding center, with a shipbuilding atmosphere around. It would be closer to our large agency yards. We had three agency yards—one at Philadelphia, one at Bristol, and the other one at Newark. And it would enable us to keep supervision over them better.

Senator CALDER. Did you have in mind in that decentralization proposition, when Philadelphia was discussed, the fact that we were building these yards and they might need closer supervision?

Admiral HARRIS. Yes, sir. After talking to Mr. Piez I sent the office manager to Philadelphia to see whether he could locate a building, and I told him preferably to locate in the same building with American International Co. He brought back a report on the building and the rent we would have to pay—in the same building. The American International, I think, had the two or three upper floors, and we were to have the floors below that. That is as I recall it. So we would be in close contact with the principal ones of the three agency companies.

Senator NELSON. Were those recommendations carried out? Was an office established in San Francisco and one in Philadelphia, as you recommended?

Admiral HARRIS. Not while I was there as general manager.

Senator NELSON. Has it been done since, to your knowledge?

Admiral HARRIS. I have no direct knowledge on that, Senator. I have not been in personal contact with the Fleet Corporation since the 20th of December, when I left.

Senator CALDER. Admiral Harris, I hesitate to break in on your statement, but this just occurred to me: While you were attached to the Shipping Board, who had supervision over the expenditures for building and equipment in these agency yards?

Admiral HARRIS. The shipyard plant division had general supervision over shipyard plants. They were handled separately from the other work. There was an officer at each company. Mr. Ferguson—Homer L. Ferguson's brother—was in Philadelphia on the Hog Island work. Mr. P. L. Reed, who is in the Civil Engineer Corps of the Navy, was on the plant work, and he was under the shipyard plant division, of which Admiral Rousseau was the manager. They gave him general supervision of the conduct of the work and the expenditures, and he was to report on conditions there. In fact, while I was general manager, reports came in indicating that the work was lagging, and that the cost was in excess of the estimate, and I sent for Admiral Rousseau and had a talk with him and got a special report from Mr. Reed, which indicated that the cost of that plant was going to be considerably in excess of the original estimate.

Senator VARDAMAN. What plant was that, Admiral?

Admiral HARRIS. The Hog Island plant.

Senator CALDER. And that was as early as December 1?

Admiral HARRIS. It was in early December, Senator.

Senator NELSON. Mr. Chairman, before we proceed I wish you would send and get a copy of that report of Admiral Rousseau's.

Admiral HARRIS. Of course, I can not get that.

Senator NELSON. I am asking the chairman to send for that

The CHAIRMAN. The report of Admiral Rousseau to whom?

Admiral HARRIS. Senator, I can not recall how it came. Admir Rousseau can probably supply that. You see, I have been separate from the files of the Fleet Corporation since leaving there, and have had no opportunity to refresh my memory. This is just on of the things that passed before me. As I recall now, the estimate to me then stated the cost would probably be $29,000,000 instead c $21,000,000.

Senator NELSON. As I understood you, Admiral—excuse me to interrupting you—you requested Admiral Rousseau to look up thi matter, did you not?

Admiral HARRIS. Yes; to get a report.

Senator NELSON. To get a report? It is this report I refer to Mr. Chairman.

The CHAIRMAN. A report from Mr. Reed to Admiral Rousseau?

Admiral HARRIS. Yes.

Senator JONES. Admiral Harris, was Mr. Reed stationed at th Hog Island yard?

Admiral HARRIS. Yes.

Senator JONES. To look after the interests of the Emergency Flee Corporation?

Admiral HARRIS. To look after the construction of the plant yes, sir.

Senator JONES. It wou'd be better to have him down here, ther

The CHAIRMAN. Is he still there?

Admiral HARRIS. He is still there, sir.

Senator JONES. He has stayed there all the time?

Admiral HARRIS. Yes, sir.

Senator NELSON. Did you, while you were in office, Admiral, eve visit the Hog Island plant?

Admiral HARRIS. No, sir.

Senator VARDAMAN. You say that that report stated that it woul probably cost about eight or nine million dollars more than th estimate?

Admiral HARRIS. Than the estimate; yes, sir; as I recall it.

I was just going to say, Senator, when another question was aske that in discussing with me this report of Mr. Reed's, Admiral Rou seau told me that even that at the time the $29,000,000 would b exceeded, that that was not enough.

Senator JONES. You do not know whether Mr. Reed was calle here by anyone representing the Emergency Fleet Corporation, ar the whole situation talked over with him?

Admiral HARRIS. No.

Senator NELSON. Go on, Admiral, with your other recommend tions.

Admiral HARRIS. The next caption is "Organization." Und organization I had three subdivisions, suggesting expansion, dece tralization dividing the construction division, which was und Admiral Bowles, and which he had built up with great foresight an with great ability into a very capable organization. It had grow so large that I suggested its subdivision into separate division reporting directly to the general manager. I suggested the followin divisions: Construction of new steel ships and requisitioned ship construction division, wooden ships: technical and design deivision

machinery and mechanical division; and industrial service division. That was the division which Mr. Blumfield headed, under Admiral Bowles. He called it a department. I intended to make a special division, placing under it the patriotic service division.

I think most of that has been carried out. Mr. Heyworth was made manager of the construction division of wood ships while I was there.

Senator NELSON. Were there suggestions of yours carried out?

Admiral HARRIS. I think they have been carried out. I gather from the press that they have been.

Another suggestion was a combination of several divisions that had been doing similar work, statistical work, combining them all into one, so as not to have unneccessary duplication of work. There is no use burdening you with all these details.

As to the district organizations it is suggested here that the district organizations be expanded to comprehend all these subdivisions and to report directly to the general manager instead of to the construction division.

Senator NELSON. By "district divisions" you mean these divisions out in the country at a distance from Washington?

Admiral HARRIS. Yes, sir.

Senator NELSON. Under this plan the local inspectors who inspected at the yards would report to the district men and then the district men would report to you here? Was not that the modus operandi?

Admiral HARRIS. Yes, sir; except that the district men were directly under the manager of the construction division. This plan contemplated that the district officer would not be purely a construction officer, but that he should represent all of the activities; that he would be able to pass on a great many details of plans and changes in plans, and so on, so that they would not have to come to Washington. That was part of the plan of decentralization.

Senator NELSON. Was that carried out?

Admiral HARRIS. That I do not know, Senator.

Senator NELSON. It was not while you were there?

Admiral HARRIS. Not while I was there, sir.

Senator NELSON. Was it approved by Mr. Piez and Mr. Hurley?

Admiral HARRIS. I do not know whether this ever went to Mr. Hurley or not. All I know is that it went to Mr. Piez.

Senator NELSON. And he approved it?

Admiral HARRIS. In general, he agreed with it.

The CHAIRMAN. I think there has been some [illegible] in this direction; that instead of having a district officer in charge of both wood and steel construction, where both kinds of construction are carried on in the district, they have put the district officer and put him in charge of wood construction [illegible] and sent another officer to have charge of steel construction, or vice versa, as the case may be.

Admiral HARRIS. That was done before I [illegible]. That followed, naturally, from the appointment of Mr. Heyworth as manager of wood-ship construction. The reason for that was that Admiral Bowles—undoubtedly a very [illegible] man; a man to whom I gave the greatest credit for a great deal of accomplishment in the subordinate part of the organization—was not enthusiastic for wooden ships. He rather thought we would not get much out of them. While that may be so, Mr. Heyworth

enthusiastic; and I have always believed that a man who is enthusiastic for a thing is much more likely to get results than a man who does not believe in it. That was one of the things I had in mind in dividing the ship construction, taking away the part that Admiral Bowles did not believe in and giving it to the man who might, with his enthusiasm, make a success of it.

The CHAIRMAN. Before you left, Admiral, had you practically doubled your district officers?

Admiral HARRIS. I think perhaps that took place afterwards. Mr. Heyworth spoke to me about that, and the understanding was that he was to have his own inspectors in the districts. It would depend, Senator, largely upon circumstances. In the South, for instance, they are building nothing but wooden ships. You would not want to have two men there. In another district you would have nothing but steel ships, and then you would have one man, who would be a steel ship man. But where you are constructing both wood and steel ships you would have your wood-ship inspectors and your steel-ship inspectors. They would not be the same men.

Shall I continue?

Senator NELSON. Yes.

Admiral HARRIS. On the question of labor, I wrote up my recommendations after I had had a great many conferences with the international officials of the different trades. I do not think it is out of place to state that my first idea of going to the Shipping Board was suggested by some of the labor people, who appeared to be anxious that if there was a change I should go in.

In this memorandum I suggested that the compensation for labor on shipyard construction should be immediately placed on the navy yard schedule. That was something that I had already talked over before I went to the Shipping Board, while I was in the Navy Department, because as Chief of Bureau there, having charge of shore construction, we had this same problem of navy yard wages for outside contractors. We had arranged in the Norfolk district a board of control—that is, two officers, one Army, and one Navy—by which we were holding rates in that district at the navy yard scale or rate, and the Army contractors were paying practically that rate also. So this was just an application of that same thing to the Shipping Board, which we in the Army and Navy had seen was necessary.

Senator JONES. Did you also contemplate giving it the permanency that is given to the Navy scale? That is, I understand the Navy scale is fixed and continues fixed for, say, six months.

Admiral HARRIS. It can be changed at any time, Senator. It has been customary in the past to have a wage board once a year, but it is possible to change the schedule at any time.

Senator CALDER. What has been the practice?

Admiral HARRIS. The practice before this present disturbance has been once a year, Senator, because it took some time. But with conditions varying as they are now there are changes being made in the wage scale at navy yards, and had been for some time before quite frequently.

Senator CALDER. Every month or two?

Admiral HARRIS. I could not answer that definitely. There are specific cases. I do not refer to the entire schedule, but there are special cases that come up all the time.

Senator JONES. Has not the Navy adhered pretty rigidly to the olicy of making a change only once a year?

Admiral HARRIS. Yes, sir; for a great many years.

Senator JONES. But you did not contemplate putting that into fect?

Admiral HARRIS. Our idea was that if the navy yard scale was ised the other scale would be raised too, automatically; that the ould all receive consideration together; that it would be not alone case of the Secretary of the Navy passing on the wage recomendation, but he would consult with the other departments inolved.

Senator NELSON. In other words, Admiral Harris, your idea was hat the wages in shipbuilding yards should be the same as in the avy yards?

Admiral HARRIS. Yes, sir.

Senator NELSON. The same rates for piece work and day work?

Admiral HARRIS. Yes, sir.

Senator NELSON. You have both in the navy yards, do you not?

Admiral HARRIS. Yes, sir; in some.

Senator NELSON. And you would follow that scale, and adhere to it as closely as possible? That was your theory?

Admiral HARRIS. Yes, sir. You will see the necessity for that, ir, because if one plant pays higher wages, it draws away men from the other plants, and that constant interchange breaks down organization, it breaks down efficiency, and you do not get the production. A man who is staying a few weeks in a place is hardly getting used to his job when he moves on, and his production is practically nothing. When he is used to his work and becomes an old employee he becomes much more efficient.

The CHAIRMAN. That is true in the wooden shipyards, as well as the steel yards?

Admiral HARRIS. I presume it is, Senator; yes; because there you have the shipwrights, and you have the shipwright rate in the navy yard just the same. Of course, they do not build the wooden ships in the navy yard, but they make lots of repairs and they have lots of shipwrights and carpenters.

Senator JONES. At any rate, you expected to give it the same permanency that existed in connection with navy yard work?

Admiral HARRIS. Yes, sir; to avoid competition.

Senator NELSON. And, in addition to that, as I understood you a while ago, you contemplated having "missionary" work, as I call it, done among the laborers?

Admiral HARRIS. Yes, sir. That is being done; that is being organized now.

Senator NELSON. In other words, appeals made to their patriotism?

Admiral HARRIS. Yes, sir; so that they will feel they are a part of the war force, which is really what they must feel.

Senator VARDAMAN. Admiral, you have had a good deal of experience in that line of work. Have you not found that that character of appeal with the individual has been productive of good?

Admiral HARRIS. Yes, sir; if you can make them fully realize it; if you can convince them.

Senator VARDAMAN. Of course you have got to appeal to the man's understanding, and you have got to excite within him the pride of citizenship in order to get any response.

Admiral HARRIS. And pride in his work.

Senator VARDAMAN. Well, of course, that is it. My observation has been that when that is done, where you have aroused in the individual his sense of responsibility to his Government, to his country, and his obligation to his family, it has always been productive of good, and when brought to understand it, they have universally responded.

Admiral HARRIS. It is quite a task. You have got to do a lot of educational work.

Senator VARDAMAN. Well, you have got to do that with every class of people. I do not know of anybody that it is more difficult to convince than the Congress of the United States. But go ahead with your statement, Admiral.

Admiral HARRIS. There was one other thing that I suggested with respect to labor, after I had talked with the international officials who first objected to it very much—the paying of a premium for continuous-term service. The trouble is that in many cases, the older workmen, with families, want this additional pay, because they have a house they are paying for or something of that kind, and they will work more or less steadily. But to a great many of the younger men, especially the floating element, higher pay means that they do not have to work six days a week. It means three or four days' work and two or three days' lay off. That is harmful, not alone because of losing those men for the two days, but on account of the lack of continuity on the job. You have so many men assigned to a job, and they work all one day and they go home. The next morning that gang still has something to do, and if even one man out of the gang does not show up it breaks up the continuity of the job. It has a very injurious effect.

Senator NELSON. You break up a gang of riveters, for instance, if one man quits?

Admiral HARRIS. Yes; in some cases it is worse than that. So it was suggested that a percentage be added for—I suggested 56 hours' work a week. I think I first suggested 60 hours, and after conferring with the shipbuilders on the Atlantic coast they cut it down to 56.

Senator NELSON. That would mean nine hours a day, would it not, Admiral?

Admiral HARRIS. Yes; 48 hours would mean eight hours a day.

Senator NELSON. You suggested cutting it down to 56, you say?

Admiral HARRIS. No, sir; the shipbuilders suggested cutting it down to 56.

Senator NELSON. They were then working 10 hours?

Admiral HARRIS. Yes; they thought that 56 hours a week was just about as much on an average as a man could work to good efficiency.

Senator CALDER. But your suggestion of 60 hours and their suggestion of 56 hours were both based on the eight-hour working day and overtime in addition?

Admiral HARRIS. Yes, sir; and also Sunday work. You see, in some cases they work Sundays. We have a great many cases in the Navy where, on account of the time-and-a-half work, some of the men will not show up on Friday and Saturday and will want to work on Sunday. That is what I had in mind in fixing 60 hours.

Senator CALDER. Speaking of Sunday work, is it not a fact that during these rush months since the war began nearly every navy yard in the country has worked Sundays?

dmiral HARRIS. Well, they have done some Sunday work, ıtor. They have not worked to full capacity on Sundays. They ɔnly supposed to work on emergency work on Sunday—work that t continue, that can not be slighted.

nator NELSON. They adopt the Biblical doctrine, of course, that only in case where your animal falls into a well that you have a t to pull it out on Sunday?

dmiral HARRIS. Well, they do not go quite so far. The whole of that bonus was that while it would cost something additional, additional output of man power, the additional efficiency, and tional speed would probably cover that. I took that up with missioner Stevens, and also with Mr. Piez. I do not know ther this recommendation guided them or not, but apparently ı it came to the West Coast Conference they appeared to have ɔted it.

nator NELSON. They adopted your premium scheme?

dmiral HARRIS. The scheme—I do not know whether I originated : not, but it was suggested in this memorandum before it was ɔted.

nator JONES. You started to explain about the objections of the rnational people. You said they were opposed to it at first.

dmiral HARRIS. They thought so at first. They were rather ɔsed to anything with the name of "bonus" attached to it.

nator NELSON. That is, they opposed it in the case of laboring ı, but not in their own case? Evidently they were not opposed ı bonus—I mean the company.

enator JONES. These were international labor leaders.

enator NELSON. Oh, I thought he referred to the company.

dmiral HARRIS. No, sir; these were presidents of the various les-unions whom I met in informal conference.

enator NELSON. I misunderstood you. I thought you referred to American International Shipbuilding Co. at Hog Island.

enator JONES. Did they finally accept your bonus?

dmiral HARRIS. I do not think it came to that, but they did seem to oppose it so much. They rather had the idea that the essities were so great that we must have a certain amount of n power to turn out what we wanted, that this would be an in-ument whereby we could get additional man power without ting additional men, and that perhaps something could be done h it.

enator JONES. They manifested a disposition, during the war any rate, to make some concession along those lines?

dmiral HARRIS. Yes, sir. Their disposition in this and in other ngs, as far as the international officials are concerned, has been t wherever they could they would be helpful.

enator CALDER. What else have you there, Admiral?

dmiral HARRIS. The next division under "Labor" was largely analysis of the need of increasing the number of men. That n the basis of the work that Mr. Blumfield was doing in his strial Service Division, and the mark we were aiming at—what production could probably be with the men we had and how we to increase it.

at followed on something that had already been taken up by hairman; that is, temporary exemption from the draft in order

to get the men. I also put in here, at the suggestion of a Mr. Hill—Mr. Hill was over here representing English labor, and stated that the returning from the trenches of skilled labor had had a salutary effect in the British shops, and in the British shipyards. So I included in this that we should make a register of the troops in the Regular, National, and Volunteer Armies, and where they had had experience and were skilled in shipyard work, bring them back; it being felt that the effect of the coming into of a shop of a man who had been working the way a soldier has to work would have a good effect on the output.

Senator JONES. It was not the idea to take a man back until after he had had service in the trenches?

Admiral HARRIS. Or even in the cantonments.

Senator JONES. But it would be more effective with his comrades if he had had actual service in the trenches?

Admiral HARRIS. Yes.

Another subdivision is the issuing of distinctive badges or something of that nature to all shipyard workers. That was a part o the Patriotic Service scheme.

The question of housing for employees was taken up. I migh read you that; I think you are interested in it.

Senator HARDING. I think, Mr. Chairman, we might pass that We have already passed on that, admiral, and recommended a hous ing program, so it is scarcely at issue in any way.

Admiral HARRIS. Well, I did not know that anything was at issue in this.

Senator HARDING. The housing program has been covered by a bill which provides for it. I did not know whether you had followed that or not.

Admiral HARRIS. I have seen something of it in the press.

Senator HARDING. The Senate has already acted and appropriated $50,000,000. I only suggest that in order to gain time.

Admiral HARRIS. I am not familiar with what you have done, but this practically covers everything, showing that the question of housing was taken up in that preliminary memorandum.

Senator NELSON. How long were you with the Fleet Corporation, Admiral Harris?

Admiral HARRIS. I was general manager there three weeks. I was there about 10 days before Admiral Capps left, so I was really there about four weeks.

Senator NELSON. Did you pass on any contracts while you were there?

Admiral HARRIS. Yes, sir.

Senator NELSON. Were contracts let there with your approval?

Admiral HARRIS. Yes, sir.

Senator NELSON. What contracts were they?

Admiral HARRIS. I do not recall them now, Senator, but I should think that those in the period from December 1 to December 20, after Admiral Capps had left and while I had to O. K. them, were of course passed on by me.

The CHAIRMAN. You were general manager for how long?

Admiral HARRIS. I was general manager for three weeks, sir.

The CHAIRMAN. And you were there for a week before that, or such a matter?

Admiral HARRIS. Yes, sir.

The CHAIRMAN. And you ceased to be connected with it when?

Admiral HARRIS. I received orders detaching me on the 20th of December.

Senator CALDER. Admiral Harris, Mr. Ferguson, of the Newport News Shipbuilding Co., and Mr. Powell, of the Bethlehem Co., have stated they were never asked to confer on any shipbuilding program or any of the work of the Shipping Board—that is, Mr. Ferguson stated that, and Mr. Powell said that that was true until a meeting was held in Philadelphia, at which he said you and Mr. Piez were present. What brought about that meeting in Philadelphia? What were the circumstances of it?

Admiral HARRIS. I do not know directly, Senator, other than that I had had a talk with Mr. Powell some weeks before I went in as general manager, in which I outlined to him the desirability of more cooperation and frequent meetings with shipbuilders. I had gone to New York the day before that meeting and had arranged to meet the shipbuilders informally. That was before Admiral Capps had left. I did meet several of the New York shipbuilders there and took up this question of transportation to Staten Island with a view to improving conditions so we would run those yards to full capacity. It had apparently not received attention before. I then received word from the Atlantic shipbuilders stating there was to be a meeting of the shipbuilders in Philadelphia the following night, and that therefore they would not be able to come to New York, and asking me to attend that meeting. Subsequently I received a telegram from Mr. Piez saying he was going down there and asking me to join him.

Senator CALDER. Admiral Harris, the statement has been made that you were responsible for entering into a contract for spending something like $12,000,000 of the Shipping Board's money without authority from Mr. Piez or Mr. Hurley.

Admiral Harris. Twelve million dollars of what? I could not enter into any contracts, Senator; all I could do was to recommend or initial a contract. There never was any question about that. I did not have authority to enter into contracts, as general manager.

Senator CALDER. Did you ever attempt to enter into any such contract without their approval or consent— —

Admiral HARRIS. No, sir.

Senator CALDER (continuing). As I understand it, to build ships under certain conditions? You know of no such thing?

Admiral HARRIS. No, sir; unless you refer to the published statement at the time of my leaving the Shipping Board that I desired to expend about $12,000,000 of funds for housing the workmen. Do you refer to that, Senator?

Senator CALDER. That may be the matter I refer to. Did you attempt to enter into any contract without the approval of Mr. Hurley or Mr. Piez?

Admiral HARRIS. No, sir; I had a conference with Mr. Eidlitz and found out what he had done, and was impressed by the fact that he had waited around here nine weeks and could not get anybody to talk to him, and was ready to throw up his job; and I induced him to stay on, saying that something would be done, and I would take it up. I sent for Judge Payne, the general counsel, and asked him whether the funds appropriated by Congress were available for housing, and he gave me an opinion that they were; that everything in connection with shipbuilding and necessary for shipbuilding was included.

Senator NELSON. What time was that, Admiral?

Admiral HARRIS. That was along about the 10th of December. So I told Mr. Eidlitz I was quite sure we could go ahead with it and that I would let him know the next day. It appeared then in conference that he had not worked up his details on anything other than Chester, and that that was not completely worked up. It involved about $1,000,000. But I did not think I had authority to do th t, and I took that to Mr. Hurley the next day, Mr. Piez being away in Chicago, and asked him to pass on it.

Senator NELSON. Did he pass on it?

Admiral HARRIS. No, sir; he did not.

Senator JONES. According to the opinion of Mr. Payne, who was the legal counsel for the Emergency Fleet Corporation, the corporation did have authority to use the money Congress had appropriated for housing purposes?

Admiral HARRIS. Yes, sir.

Senator JONES. If they deemed it necessary?

Admiral HARRIS. Yes, sir.

Senator JONES. And no additional legislation was really necessary according to his opinion?

Admiral HARRIS. In my opinion and in his opinion it was not necessary, and under the circumstances existing, had I had authority, I would only have come to you gentlemen for a deficiency appropriation after I had started this housing.

Senator JONES. Did you initial any proposal to use a certain amount of money for housing purposes?

Admiral HARRIS. No, sir; there was no proposal.

Senator JONES. Did you recommend to Mr. Hurley or Mr. Piez any definite amount for housing purposes?

Admiral HARRIS. No, sir; I do not recall that I did. I merely talked to Mr. Hurley and told him Mr. Eidlitz had been here about the question of housing and that we ought to pass on the Chester proposition, whether we would go ahead or not go ahead.

Senator JONES. In other words, there was practically no truth in the statement in the papers with reference to that $12,000,000 proposition?

Admiral HARRIS. No, sir.

Senator HARDING. And you had the Emergency Fleet Corporation under observation at close range for about four weeks?

Admiral HARRIS. Yes, sir.

Senator HARDING. Tell us what was the matter with it from your viewpoint.

Admiral HARRIS. Senator, I am not with the Fleet Corporation now. I do not want to do anything that is not constructive. I do not believe in any criticism that does not do any good.

Senator HARDING. Then what is needed to make it go along at full swing and produce ships? That is what we are trying to get at. We are trying to help the Shipping Board.

Admiral HARRIS. I do not know that my opinion ought to be expressed on that. I hesitate to give it.

The CHAIRMAN. The by-laws were changed about the time you were detached, or before you were detached?

Admiral HARRIS. No, sir. The by-laws were changed before I went in, when Admiral Capps was still there. I think the by-laws were changed about November 15.

Senator NELSON. Yes, I think that was about the time.

The CHAIRMAN. So the power and authority of the general manager when you became general manager were as determined by the by-laws as they exist now, not as they were when Gen. Goethals was general manager?

Admiral HARRIS. I do not know what they are now; practically. In other words, the general manager had such authority as could be delegated to him. That is about what it meant.

The CHAIRMAN. Under the old by-laws, the general manager seems to have had authority to proceed in the making of contracts, although——

Admiral HARRIS. No, Senator.

The CHAIRMAN. Although it did not include his final signature. When Gen. Goethals was there he did not have to confer with other people about what he should do?

Admiral HARRIS. No, he really did, Senator—excuse me—because he still had to get their signatures to a contract; and while he could initial a contract, that only meant recommending it. If you had authority to negotiate a contract, it would not bring much in the way of results unless you had authority to close without the knowledge of the man who signed.

The CHAIRMAN. But the claim now is that the by-laws have been changed, so that the ultimate authority now rests in the chairman of the Shipping Board and the president of the Emergency Fleet Corporation, and the general manager is merely appointed by the chairman, subject to his removal or disposition at any time he likes; he has no authority except what the chairman sees fit to give him, whereas before the by-laws were changed the general manager had certain powers and authority and duties that were independent of the control of the chairman, but not independent of the chairman, who was also president of the Corporation, because even under Gen. Goethals he could and did check him.

Admiral HARRIS. While existing; yes, sir.

The CHAIRMAN. And those were changed. I am not sure whether they were changed before you went in or after.

Admiral HARRIS. They were changed before I went in; changed in November.

Senator VARDAMAN. Admiral Harris, I agree with you that a criticism which is not constructive is hurtful, and I do not want you to say anything which would embarrass you professionally or in any way embarass the Shipping Board. But if you have any information to give this committee which would enable Congress to help the Shipping Board to avoid the breakers that have delayed them in the work they have been doing I would like for you to state it.

Admiral HARRIS. Well, I do not know that I can answer that directly. I can simply say this, Senator, to explain it, that a department like the Navy Department or the War Department has an organization largely fixed by law, and it has been evolved through years of usage and experience, with changes as the need for changes has arisen. A big corporation like the Pennsylvania Railroad or the Standard Oil Co. has evolved organization through competition, through the survival of a fit system, through being kept on their settle. They have organizations——

Senator NELSON. You ought not to apply that to the Pennsylvania Railroad now, with all their locomotive and car shortage. It has broken down worse than any railroad in the country.

Admiral HARRIS. But if they had had no organization, Sena they would have broken down long ago. Is not that right?

Senator NELSON. Well, it does not begin to come up to our wes railroads. [Laughter.]

Admiral HARRIS. Then I will take the Northern Pacific as example, instead of the Pennsylvania.

Senator NELSON. Excuse me for breaking in on you.

Admiral HARRIS. The Fleet Corporation, on the other hand, corporation larger than the Standard Oil Co., larger than the Un States Steel Corporation, larger than the Navy Department in expenditures involved; and it was created overnight, with no org zation, and they have not evolved anything by experience and have got to work something out.

Senator NELSON. You measure the bigness by the bigness of appropriation, do you not?

Admiral HARRIS. I think that is a fair measure of the bigne the business.

The CHAIRMAN. We all agree they have got a big task on hands.

Admiral HARRIS. There has been a good deal of talk about Fleet Corporation being run as a business on business methods, that the military services are not run on business methods. N as a matter fact, the business of the Fleet Corporation is not real business at all. It is just as essentially military as anything u the Navy Department or the War Department. You do not to consider dividends. You do not have to consider taxes. do not have to pay interest on bonds. In other words, money not enter into it. It is a case of expedition in construction quantity of construction. It is, therefore, not a business organ tion; if it were it would go to the wall.

I had been accustomed in the Navy Department to organiza along a certain definitely laid down line, where I had just as m of a boss, where I had just as much to have some one over me supreme authority, as in the Shipping Board. I had to answe the Secretary of the Navy and to the Assistant Secretary and to Chief of Operations. As a subordinate, my duties were fi Also, my subordinates were under me. I had to produce res I gave them their orders. They came to me with their reports. they did not make good I would see that they did, or I would some one else. They had to be loyal to me, and I had to be l to them. It may seem and may be unbusinesslike, but my supe never went to my subordinates and gave them orders, nor did superiors ever have my subordinates go over my head and re to them. That is essentially my criticism of the Fleet Corporat

Senator JOHNSON. And is that what happened?

Admiral HARRIS. That is what happened.

Senator JOHNSON. In your opinion, are we going to get 6,000,000 tons of shipping?

Admiral HARRIS. I would rather not express an opinion on t unless it is in executive session.

Senator HARDING. I would like to ask the admiral right t what he means by "his chief going over his head." Cite an inst

Admiral HARRIS. Admiral Bowles was sent for by the chair reported to him on several occasions, and received directions from

Mr. Radford, of the Contract Department, was sent for, too, and finally Mr. Radford came to me and told me he did not like to go: that if I did not want him to go over my head, why I was to tell him what to say; that he regretted to inform me that he had been instructed every evening to report to the chairman exactly what had transpired during the time.

Admiral Rosseau, of the Shipyard Plant Division, came to me and advised me of a report he had been ordered to make by the chairman, and stated it was not according to Hoyle. He did not think anything was intended by it, but he wanted me to see that he received these instructions.

Mr. Heyworth, of the Wooden Ship Construction Division, in the same way, reported directly.

I spoke to Mr. Piez about the matter, and Mr. Piez was at first inclined to say, "Oh, well, that is the difference between you naval officers used to a military establishment and business methods." But he finally admitted to me that he would not do that, and had not done it with my subordinates; that he would get reports through me or else notify me that he wanted to see my subordinates, so that I could send them to him; that they could know they were going with my knowledge.

That sort of thing works very well with people who have worked individually, but to a naval officer or to a man who has been used to working in an organization, with my mental processes it is confusing, and I can not work well that way.

Senator JONES. Do you not think a system like that would bring confusion in almost any kind of work of large size?

Admiral HARRIS. I can not answer for that, sir, but only for my own experience.

Senator VARDAMAN. That system would break down in private life. It is not only a military system, but it is a good business system to hold a man responsible for the work of his subordinates, and I do not see how it could be managed otherwise successfully.

Senator JONES. Did Mr. Piez argue that he followed a system like that in his business?

Admiral HARRIS. No; I do not think he did. He attempted to excuse it, as I said before. After awhile under such a procedure your subordinates do not go to you, but they probably hang around the outside of the door and say, "Do not bother about him. Let us go go right up to the top."

While I was there Mr. Powell was coming down to confer about contracts. He sent three telegrams, one to me, one to Mr. Piez, and one to Mr. Hurley. I asked why he did that. He said, "Well, I have got to see all three of you." It is not that I wanted to see him or anyone else. If I was not the one to see him, I should be notified, and the one he is to see he could telegraph to, and he is to know who to report to. But he told him to come, and then the next man, and then that kept on swinging around the circle, and that accounts for months of delay in getting ships under construction.

Senator HARDING. Admiral, how do you account for this very unusual procedure?

Admiral HARRIS. I did not account for it, sir. Those things are personal. There are some men who have run their personal business by direct personal contact and made a great success of it, and can

do things that way, and I do not question men who have succeeded that way. They have done it. Gentlemen, I can not work that way

Senator HARDING. All contracts came to you for your initialing, nevertheless?

Admiral HARRIS. Yes, sir; while I was there the procedure under Admiral Capps was not changed.

Senator NELSON. But, Admiral, were you consulted as to whether a given proposition by a shipbuilding firm ought to be accepted or not and whether it was appropriate?

Admiral HARRIS. Oh, yes, sir.

Senator NELSON. Did you pass your judgment on it?

Admiral HARRIS. Yes, sir.

Senator NELSON. In all cases, while you were there, were you consulted?

Admiral HARRIS. Yes, sir.

Senator NELSON. No contract was made without your O. K.?

Admiral HARRIS. No, sir; not to my knowledge.

The CHAIRMAN. Were there any other elements of delay carrying out the program, Admiral, outside of this matter that you mention, that people would pass from one to another and not know who to take up matters with, and that sort of thing?

Admiral HARRIS. Nothing, other than it had grown to such a point that it was apparent that decentralization would expedite it. I mean, a man can only do so much, and if you put everything through the neck of a bottle you have either got to make the neck larger or else have two or three necks; that is what I mean by "decentralization"—did not want much to come to Washington; wanted to split up the centralizing.

The CHAIRMAN. Was it not considerable centralization to put three plants within a radius of 50 miles of each other there in the congested district, enormous plants that they were?

Senator NELSON. With a naval plant close by?

Admiral HARRIS. Yes, sir; but in a way there is a large population to go on in that district. Perhaps those plants themselves were too much centralized, that they were a little too large. But in locating anything that must be supplied with labor, if you place your plant in a location where you have a population to draw from, it assists you and you do not have to bring workmen down to the plant from distances to as great an extent as you do in a smaller community.

The CHAIRMAN. If you had smaller plants you could scatter them so as to get to the labor without its coming to you?

Admiral HARRIS. That would be better undoubtedly.

Senator CALDER. Mr. Powell thought it was agret mistake to have 50 ways in one shipyard, and he thought 15 was quite sufficient. What do you think about that?

Admiral HARRIS. I am inclined to think that they bit off a little more than they could chew on that, sir.

Senator VARDAMAN. You mean in that Hog Island deal?

Admiral HARRIS. I think perhaps they could work up to 50 ways possibly after a while, but as a new sudden development it was a pretty big thing, pretty radical.

The CHAIRMAN. As a practical proposition, would you not favor having plants with a less number of ways, as a general thing, putting two ships to the way, in getting the capacity of a plant?

Admiral HARRIS. Of course, that means, Senator, that you have a hip on the ways, and at a certain stage of its completion you can tart on another ship?

The CHAIRMAN. Yes.

Admiral HARRIS. But that would not apply to these fabricating lants, because they were fabricating and assembling material away rom the yard. That is not entirely a shipyard proposition. This vas an assembling plant largely. I mean, you did not punch and hear your sheets and build your machinery and everything in that ne plant. This was really an assembling plant, you might call it.

Senator NELSON. Mr. Powell, was of the opinion that they had a lant involving altogether too many ways. He thought it never ught to have exceeded 15 or 16 ways, and he thought it would be better and more efficient if they had only 10 ways, I mean for immediate work.

Admiral HARRIS. I think perhaps Mr. Powell was nearer right han 50 ways.

Senator NELSON. You are inclined to concur with him then, ather than to hold the opposite opinion?

Admiral HARRIS. Yes, sir.

Senator VARDAMAN. Admiral, Mr. Powell expressed some doubt about the efficiency of the fabricated ship. What is your opinion of the possibility of making these parts in different factories and assembling them for construction of the ship? Do you think that is going to work satisfactorily?

Admiral HARRIS. I think so, sir. I think there may be a little difficulty, may be a little delay at the beginning in getting into your stride, but I think it is a perfectly workable proposition, and when they get under way they will produce ships very rapidly.

Senator NELSON. One of the witnesses here stated that the ship constructed in that way would be very unsymmetrical.

Admiral HARRIS. She would not be as aesthetic to the eye, for the simple reason that you are used to more sheer in a ship—I mean she would seem to be flatter, and she would appear to be almost hogged.

Senator NELSON. Do you think it would serve the purpose quite as well?

Admiral HARRIS. Yes, sir; I do, and be a very useful vessel.

Senator CALDER. Mr. Powell said, admiral, that you could not start on a fabricated both ways from the middle and get to the ends, no matter what care you had taken in preparing the steel and the rivets, without there being great difficulty in putting the ends together.

Admiral HARRIS. I am inclined to think that, from what I have observed on that, that that will be so with the first few ships. I think they will work out of it, however, because it is a continuous process, Senator, you see. They are building the same size ship, building a great many of them, and they will have trouble with the bow and stern to begin with, I think, but the maximum of the length of the ship is the straightway work.

Senator VARDAMAN. It will greatly facilitate the work, will it not, and hurry it up?

Admiral HARRIS. I think it will expedite the maximum output—that is, the production capacity of the country in shipbuilding eventually, perhaps not this year, and may be not until next year, but it will eventually expedite the shipbuilding production.

Senator VARDAMAN. Well, we will learn during the war how to build ships after the war.

Senator NELSON. Will they be able to build these fabricated ships so that they will be as good ocean-going ships, and stand the perils of navigation as well as the old style ships, constructed in the shipyards? Do you regard fabricated ships as safe for navigation purposes, in case of a storm or anything of that kind?

Admiral HARRIS. Why, yes; certainly.

Senator NELSON. They are flat bottomed, are they not?

Admiral HARRIS. They are comparatively so, but then all steel ships are practically flat bottomed now, and have been so for some time.

Senator NELSON. Have they no keel?

Admiral HARRIS. Practically none, sir.

Senator NELSON. As I understand it, the lines of these ships are nearly straight; there is no curve at all from stern to bow?

Admiral HARRIS. Well, of course, there are some lines to it, but you take the average cargo ship, and her midship section is practically square; when it comes to the lines of the bow and stern they are not particularly fine.

Senator NELSON. Do you think their power of speed is as great where they have square bows and not round like the old fashioned boats?

Admiral HARRIS. The bows of these vessels are not square, sir.

Senator NELSON. I mean, they are more square than the others?

Admiral HARRIS. No, sir.

Senator NELSON. Are they as pointed as the others?

Admiral HARRIS. Well, when you say "the others," I do not know what you mean.

Senator NELSON. I mean the others constructed according to the old method, non-fabricated steel ships.

Admiral HARRIS. I think so. I think their lines are just as good. I think they have made some test in the model basin; I am not sure, although you can ascertain that by inquiring of Admiral Bowles, and I think they get very good speed from some of the ships built for troop ships. I think their speed—I do not think there is any secret in that—is something like 15 knots, a very good speed.

Senator NELSON. I did not know. I was just inquiring. I was wondering if boats constructed on that plan would make good speed and have as good steerage way—you know what I mean by that?

Admiral HARRIS. Yes, sir.

Senator NELSON (continuing). Are the ships constructed entirely in the shipyard, non-fabricated ships?

Admiral HARRIS. I think so; without doubt, sir.

The CHAIRMAN. Could you make us any suggestions that might tend to cause an increase of production and speed the production of these ships? Have you any suggestions that occur to you that might be put into effect which would cause a quick supply and enough of it?

Admiral HARRIS. I think the supply of labor enters into it, and education of labor. Your production is directly proportional to the effective work you can put at it—expeditious action on everything.

The CHAIRMAN. Have you got that figured down to so many tons per man?

Admiral HARRIS. I have heard a great many statements on that, Senator. I have heard from many sources, start in with 24 to 25 tons per man per year, and it runs down to 12 tons per man per year for passenger ships and so on. I think under present conditions, with the inexperienced men—you see that figure was with the pick of your men and working in average times—but with inexperienced men and the turnover of men that you have, with present conditions, what it will be I do not think anyone can prophesy. But it will be a great deal less than 24 tons per man per year and probably not over half of that, and this is to be expected and is part of the problem you have to solve in my opinion.

Senator NELSON. Have you ever estimated the tonnage that is required for transporting troops per man?

Admiral HARRIS. I would rather not answer that in open session Senator.

Senator HARDING. We have had a good deal of testimony, Admiral, as to the amount of tonnage we are going to produce in 1918. You naturally have given that some consideration.

Admiral HARRIS. Yes, sir. While I was there I was considering it.

Senator HARDING. What do you say as to the shipbuilders' estimate that 3,000,000 tons this year will be a very large output?

Admiral HARRIS. Senator, I think there is a great deal of misapprehension among even possibly you gentlemen, when you talk of "tons." Even the newspapers get it mixed up pretty badly. You never pick up an article but that they mix it. When you talk of 3,000,000 tons, what do you mean? Is that "tons" dead-weight?

Senator HARDING. Yes.

Admiral HARRIS. Including commandeered ships?

Senator HARDING. Yes.

Admiral HARRIS. Oh, I think it will be in excess of that.

Senator HARDING. Do you think the optomistic program of the Shipping Board, approximating 6,000,000 tons, is possible?

Admiral HARRIS. I think it is possible, or was possible, but is getting improbable.

Senator JONES. That is, for this year?

Admiral HARRIS. I think it is possible.

Senator NELSON. Possible what? Six million tons?

Admiral HARRIS. Yes, sir; perhaps still possible.

Senator HARDING. Do you think the 3,000,000 estimate rather pessimistic and inadequate?

Admiral HARRIS. I am inclined to think that it is pessimistic, sir; although conditions may be such—the hard winter, and this sort of thing, lack of fuel, difficulty in securing men, delay in housing and improving transportation, lack of organization—as to make things pessimistic.

The CHAIRMAN. You think the materials can be had all right?

Admiral HARRIS. I do not think there is any question about the materials. I took that up with Mr. Bonner and also had some talks with the Council for National Defense. They had reports on material, and I do not think there is any doubt but that the material, steel shapes and plates are there for production in excess even of 6,000,000 tons of ships.

Senator NELSON. Mr. Powell indicated that he did not think it was likely we would have more than 2,000,000 tons.

Senator VARDAMAN. He said 3,000,000 tons.

Admiral HARRIS. Did he not mean gross tonnage, Senator?

Senator NELSON. No, dead weight.

Admiral HARRIS. You see, dead weight is something that is more or less new as shipbuilders use it, and they usually talk in gross tonnage or net registered tons. A net registered ton, just a general approximation, would be about half of a dead weight ton.

Senator NELSON. What is registered ton and gross ton—are they not practically the same?

Admiral HARRIS. No, sir.

Senator NELSON. What is the difference?

Admiral HARRIS. Well, the gross ton is the cubic capacity inside the inclosed spaces of the ship, divided by 100.

Senator NELSON. What is the registered ton?

Admiral HARRIS. It is the cubic capacity of inclosed spaces inside the scantling less the machinery and bunker space, divided by 100.

Senator NELSON. They are both on the same plan, figured on the space?

Admiral HARRIS. Yes, sir.

Senator NELSON. But the other is the freight capacity of the vessel, dead weight?

Admiral HARRIS. No, sir.

Senator NELSON. Is it not?

Admiral HARRIS. No, sir.

Senator NELSON. We were given so to understand here.

Admiral HARRIS. No, sir; it is the total capacity.

Senator NELSON. That is what I mean.

Admiral HARRIS. I know, but out of that you have got to take weight of coal, water, crew stores, and ship stores, and also you have this to consider, that if the freight you are sending is bulky freight, like live stock, hay, or automobiles, that take up bulk, the freight you can carry is less than your weight-carrying capacity. I think that your net registered tonnage, or somewhere between net registered tonnage and gross tonnage, on an average, will represent more nearly your freight-carrying capacity than does your dead weight tonnage.

Senator NELSON. He thought we could not exceed 3,000,000 tons possibly this year, including the commandeered ships and all.

Admiral HARRIS. In my opinion that is low; that is pessimistic.

Senator NELSON. So far we have got about 45, maybe 50 by this time, commandeered ships, and not to exceed 5 to 10 of ships constructed by the board; that is all we have got up to the present time.

Admiral HARRIS. You still have 11 months to run.

Senator NELSON. What do you mean by that?

Admiral HARRIS. In 1918, 11 months' work.

Senator NELSON. Yes; we have 11 months, sure.

Admiral HARRIS. You see, when Mr. Powell talks of 3,000,000 tons you must not forget that you practically have a million and a half tons done, or you had it done January 1—that is, if you take your percentage of completion of commandeered ships, your percentage o fcompletion of contract ships, your percentage of completion of wooden and composite ships, you had about a million and a half done.

Senator NELSON. You figure on the percentage that is done. I speak of the vessels that are actually afloat and are in the service or can be put in the service.

Admiral HARRIS. Yes, sir.

Senator NELSON. I do not refer to percentages. You do not mean to say we have got a million and a half tons in the service afloat?

Admiral HARRIS. I mean there is approximately a million and a lf on all these contracts. You have got to give the benefit of that, cause when you begin to do more work you will begin to put them erboard.

Senator NELSON. How much tonnage have we afloat now, of commandeered ships and ships being built by the Shipping Board?

Admiral HARRIS. That I can not answer, sir. I have not access those records now. You will get that from the Shipping Board.

Senator VARDAMAN. You do not think this whole matter is largely e of speculating, do you? You do not think it is a guess as to the nount of tonnage we will have at the expiration of 1918?

Admiral HARRIS. You might say it is a guess. I say it is a matter f judgment, based on certain conditions over which you have more r less control.

Senator VARDAMAN. The thing to do is to put out all the ships we an and trust to God for the increase.

Senator JONES. Would you think it advisable to keep the yards hat are now in existence supplied with contracts sufficient to keep hem in operation continuously?

Admiral HARRIS. Yes, sir, decidedly. That is the most logical tep to take.

Senator JONES. And you would think it most illogical to refuse ontracts to shipyards which are carrying on the Government work vell, whose ways will be vacant the first of July?

Admiral HARRIS. Why, certainly, sir.

Senator VARDAMAN. Is that being done anywhere?

Senator JONES. Yes, sir; it is. It has been brought out here in he testimony.

Senator CALDER. Admiral, when you answered Senator Harding hat we would have over 3,000,000 tons of shipping in 1918, you inluded in that the ships that had been completed, the commandeered hips, and those now in course of construction?

Admiral HARRIS. I included the program of the Shipping Board, es, sir; completed and to be completed during 1918.

Senator VARDAMAN. But he said, approximately, 6,000,000 tons, nstead of 3,000,000 tons.

Admiral HARRIS. I do not think I did, Senator.

Senator VARDAMAN. Did you not?

Admiral HARRIS. I said that was possible under favorable conditions.

Senator VARDAMAN. I understood that.

Senator JOHNSON. The Good Book says, "all things are possible."

The CHAIRMAN. While you favor keeping the existing yards busy, ou would not object to the establishment of new yards that could e operated without interfering with labor conditions and building aterials and supplies for the existing yards, would you?

Admiral HARRIS. I would not only keep the existing yards in full peration but I would establish new yards also, because I think you ght to use every resource you have; when you talk of 6,000,000 ns production it is a question of mobilization of your resources and erything has got to come together, just lock together at the right me, and that involves a high organization of your resources—your n, your materials, your shipyards, your shipbuilding experience l everything else; and if they are not whipped into shape and orized so they do lock together, then, of course, your production

falls down; that is why I mean it is hard to give a forecast on what some one else can do.

Senator CALDER. Have you any figures with you that you have worked out, or have you prepared any in relation to the probable output in 1918?

Admiral HARRIS. No, Senator, I have not. I depended entirely upon what Admiral Bowles was doing in the Shipping Board and also a statement gotten from other sources. I based my judgment largely on the man power and the reports from the Industrial Service Division, and on the ability to look after the men and train them that we could get and the indications along in December were favorable, but it was very apparent, in talking to the shipbuilders, that unless we could do something at the yards to get more workmen and keep them there contented and keep them from going away, and prevent such continuous turnover, and act promptly on such matters, it would be impossible to make any forecast and live up to it. That is why I had emphasized the housing condition and the need for decentralizing and delegating authority.

The CHAIRMAN. I think the estimate of the Shipping Board was borne out by their report from Lloyd's agent. I thought that was put into the record, but I am not sure whether it was or not.

Admiral HARRIS. That was the report of Mr. French, of which I spoke. That is the other source I mention. It was made after he had made a trip around to the yards and given his personal inspection to it. His forecast was based upon getting the labor and getting the material; so that it still came back to the point of labor.

Senator CALDER. Admiral, while you were in the Shipping Board was the Clinchfield-Sloan controversy up? Did you have to pass upon any part of those contracts?

Admiral HARRIS. What controversy in connection with that, Senator?

Senator CALDER. Which involved Mr. Ferris, the naval architect.

Admiral HARRIS. Admiral Bowles brought that question to me and I sent for Mr. Ferris and had a talk with Mr. Ferris about it and Mr. Ferris wrote me a statement in the matter, explaining his position, which is on file in the Shipping Board. I do not know whether I put it in the file or marked it "confidential" and turned it over to Mr. Piez.

Senator VARDAMAN. Do you know anything about that contract? Did you have anything to do with making the contract?

Admiral HARRIS. Sloan?

Senator VARDAMAN. Yes, sir.

Admiral HARRIS. No, sir; that was made long before I came.

Senator NELSON. Mr. Chairman, there are some things that the admiral indicated here ought to be told in executive session, and unless the committee wants to pursue his examination further I move that we go into executive session for a few minutes.

The CHAIRMAN. Have you any other questions, Senator Calder, or has any other member of the committee any questions? If there is no objection, then, we will go into executive session.

(Thereupon, at 5.10 o'clock, the committee proceeded to executive business, and at 5.20 o'clock p. m. adjourned, subject to the call of the chairman.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

FRIDAY, FEBRUARY 8, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to call, at 2.30 p. m., Hon. Duncan . Fletcher, presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Nel-n, Smith, Jones, Harding, Calder, and Johnson.

The CHAIRMAN. Gentlemen, I have a communication here from r. Piez, the vice president and general manager of the Emergency leet Corporation, inclosing a report of Mr. James O. Heyworth, anager of the division of wood-ship construction, on the subject of ncrete ship construction, showing the progress that has been made. he report is called, "Progress report, division concrete ship con-ruction," and is made as of January 30, 1918.

It seems to me that that is rather instructive; and the question rises as to whether the committee would like it to go in the record f the hearings or not.

Senator JONES. I think it would be very well to have that go in, r. Chairman.

The CHAIRMAN. Then it will be inserted at this point.

(The letter and report referred to are here printed in full, as ollows:)

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, February 5, 1918.

lon. DUNCAN U. FLETCHER,
United States Senate, Washington, D. C.

DEAR SENATOR: I am forwarding herewith for the information of the Com-ittee on Commerce a report submitted to me by Mr. James O. Heyworth, anager of the division of wood-ship construction, on the concrete ship con-truction, as of date January 30, 1918.

Sincerely, yours,

CHARLES PIEZ,
Vice President and General Manager.

ROGRESS REPORT, DIVISION OF CONCRETE SHIP CONSTRUCTION, JANUARY 30, 1918.

Previous investigations.—The possibility of using concrete for the building of ships has been under investigation for the Emergency Fleet Corporation by the Bureau of Standards since April, 1917. In addition to the studies made on the ubject, all the available data has been accumulated, and consideration has been iven to the various suggestions on types of design and methods of construction hich have come to the Emergency Fleet Corporation.

Organization.—The formation of a department of concrete ship construction as authorized December 27, 1917, and assigned to the division of wood ship onstruction. The organization which had been working on the investigation at he Bureau of Standards was transferred to the division of wood ship construc-ion of the Emergency Fleet Corporation, and offices were established in the apley Building, the entire top floor being occupied. With the men transferred om the Bureau of Standards as a nucleus, the organization comprising 34 men, s given on the accompanying chart, has been developed.

STATUS OF WORK.

Contracts.—Two contracts have been let for concrete ships. One to the berty Shipbuilding Co., of Boston, Mass., for 50 ships, contingent upon the

seaworthiness and satisfactory character of the first ship built. Second, with the Fougner American Steel Concrete Shipbuilding Co., for 6 ships, contingen upon the seaworthiness and satisfactory character of the first ship built.

Contracts have been prepared and are now under negotiation with the San Francisco Shipbuilding Co., San Francisco, Cal., for one 7,500-ton merchant ship and with the Ferro Concrete Construction Co., of New York, for 10 ships, con tingent upon the seaworthiness and satisfactory character of the first ship buil

Development of standard design.—The work is 31 per cent completed on th development of a standard design for a reinforced concrete ship, approximatel 3,500 tons dead-weight cargo-carrying capacity. The complete drawings an specifications will be ready to submit to bidders about March 1.

Approval of designs contracted for.—Any proposal requires the approval the Emergency Fleet Corporation for its plans and specifications before contra is entered into. This supervision is being given and calculations and details the design considered and approved or disapproved with expedition. Proposa are given definite action inside of 10 days. The object is to encourage bona fi proposals accompanied by plans and specifications of merit.

Consideration of designs suggested by engineers.—No complete design for reinforced concrete ship has been submitted by any engineer. Many suggestio as to detail of design or construction have been submitted, and these have been given careful consideration and are being used wherever possible in t design being prepared by the Emergency Fleet Corporation.

Concrete ships now under construction.—Close touch is being kept with concrete ships under construction, both in this country and abroad. Comple details of design and construction have been obtained in each case, or are bei secured. An engineer representing the Emergency Fleet Corporation is st tioned at Redlands, Cal., following in detail the progress of construction of 4,500-ton reinforced concrete ship.

Additional activities.—Many suggestions have been made relative to the sign or construction of reinforced concrete barges, both by private interests a Government departments. These have been given tentative consideration, b our present plan anticipates intensive study and development of the reinforc barge problem during the coming month.

Investigations.—In connection with the design of reinforced concrete ship numerous investigations have become necessary and were immediately unde taken, and the results thereby secured are of material assistance in contempl tion of an economical design. These investigations are being made at th laboratories of the Bureau of Standards.

Cooperation of shipping interests.—The cooperation of the United State Steamboat-Inspection Service and Lloyd's Registry has been secured. Bot of these bodies have detailed engineers to cooperate with and assist this depar ment in the work it is doing. The American Bureau of Shipping has al been requested to cooperate in the same way. At the request of Secretar Redfield, Chief Naval Constructor Gillette, of the Bureau of Lighthouses, spending one day a week assisting in an advisory capacity.

Assistance to foreign governments.—Through Naval Constructor McBrid this department furnished the English Admiralty, at their request, with com plete information and details of design on the concrete ship being built Redlands, Cal., by the San Francisco Shipbuilding Co.

Present program.—The present program of the Emergency Fleet Corporatio calls for the immediate construction of four or five experimental reinforce concrete ships, along different designs, to be built by different contractors. Th future program for the construction of concrete ships is contingent upon succes or failure of these first five.

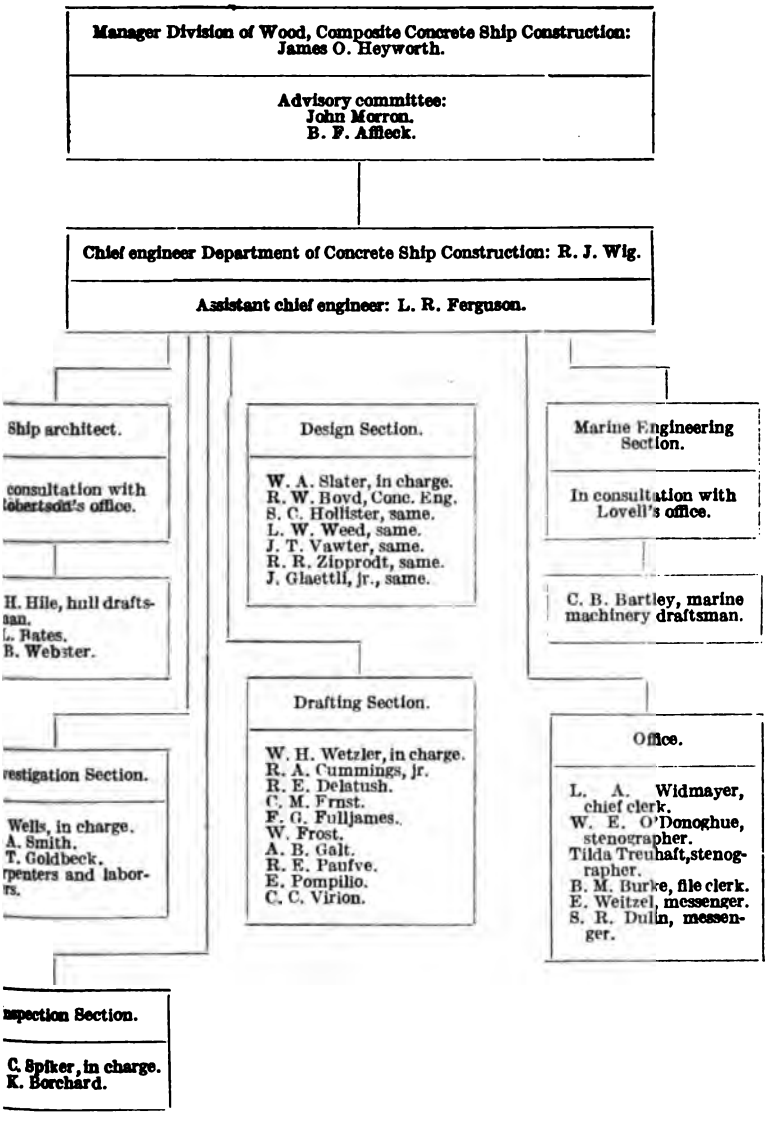
No reinforced concrete ships larger than 600 tons have so far been launched therefore we do not feel safe in entering on a comprehensive and elaborat program of construction of concrete ships until some further information available on the feasibility of this type of construction.

The San Francisco ship, which is of 4,500 tons cargo capacity, will b launched by the latter part of February, and several others will be on th water by spring. Future developments may at any time cause a modificatio of this program.

Respectfully submitted.

JAMES O. HEYWORTH,
Manager, Division of Wood Ship Construction.
R. J. WIG,
Chief Engineer, Department of Concrete Ship Construction.

ORGANIZATION CHART DEPARTMENT OF CONCRETE SHIP CONSTRUCTION.



UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, February 2, 1918.

PERSONNEL OF DEPARTMENT OF CONCRETE-SHIP CONSTRUCTION.

L. R. Ferguson. Salary, $1 per year. Engineer of Portland Cement Associati (salary, $5,000 per year and expenses). Graduate Pennsylvania Universi Ten years with Portland Cement Association. Detailed to Bureau of Sta ards for past one and one-half years on cooperative investigations of concr in sea water for the Navy Department.

W. A. Slater. Assigned from Bureau of Standards (salary, $3,000 per yea Formerly professor at the University of Illinois. He has spent the past years in investigating reinforced concrete structures, both in the laborat and in the field. He was closely associated with Prof. Talbot in much of work on reinforced concrete, and has written many papers and discussions the subject.

R. W. Boyd. Salary, $25 per day when employed. Consulting engineer New York City. Graduate of New York University. Previously employed the committee of American concrete institute for period of three months, m ing special study of concrete-ship problem.

S. C. Hollister. Salary, $2,500 per year. Graduate of University of Wisc sin. Research engineer of the Corrugated Bar Co., Buffalo, N. Y. He is exceptionally skillful analyst of reinforced concrete and has made a spec study of unusual designs.

L. W. Weed. Salary, $2,400 per year. Graduate of Harvard Universi Formerly designing engineer with Turner Construction Co., of New York Ci He has had both office and field experience.

Capt. J. T. Vawter. Detailed from Corps of Engineers, United States Arm Consulting engineer, Los Angeles, Cal. Graduate of University of Illin He has developed a unique system of reinforcing, specializing in reinforc concrete design.

R. R. Zipprodt. Salary, $1,500 per year. Graduate civil engineer of t University of Illinois. Made a special study of reinforced concrete.

J. Giaettli, jr. Salary, $3,000 per year. Is a graduate of the University Wisconsin; was instructor in structural engineering and mechanics, und Prof. Turnauer. He has specialized in analyses of reinforced concrete, maki a study of unusual designs.

H. H. Hile. Salary, $3,000 per year. Loaned from the technical division the Shipping Board. Eight years' experience at shipbuilding, six years w Newport News.

J. L. Bates. Salary, $2.50 per hour when employed. Now chief estima of the Bureau of Construction and Repair of the Navy Department. Will w for Shipping Board on overtime only, approximately three days or more i week and three hours per day. He has been cooperating with the Bureau Standards during the past few months on the design of reinforced-concr ships, and can render very valuable service.

F. B. Webster. Salary, $2.50 per hour when employed. Now employed skilled ship draftsman at Bureau of Construction and Repair of the Na Department. Will work for Shipping Board on overtime only, approximat three days or more per week and three hours per day. Has been cooperat with the Bureau of Standards during the past six months in checking desi of reinforced-concrete ships, and will render very valuable service.

C. B. Bartley. Salary, $35 per week. Marine-engine draftsman, rec mended by Mr. Lovell, of Mr. Ferris's office.

H. Wells. Salary, $3,600 per year. Graduate of West Point and Univers of Michigan. Designing engineer in reinforced concrete. Formerly engin in charge of the Washington office of the Truss-Concrete Steel Co. Has de oped several new systems of reinforcing and fabricating.

G. A. Smith. Assigned from the Bureau of Standard (salary, $1,500 i year). Graduate civil engineer of the University of Missouri, with spec training in reinforced concrete.

A. T. Goldbeck. Assigned from the Office of Public Roads in Rural Engine ing. Graduate of University of Pennsylvania. At present testing engineer the Office of Public Roads. He has had a large experience in research and te ing of reinforced concrete.

W. C. Spiker. Salary, $3,600 per year. Consulting engineer of Atlanta, G Graduate of Cornell University. Designed many reinforced concrete buildi

southeastern part of United States; also experienced as superintendent of nstruction. Particularly familiar with materials and conditions in the South.
E. K. Borchard. Salary, $1 per year. Technical engineer Atlas Portland ment Co., New York City (salary $2,000 per year). Six years with the rtland Cement Association in inspection and design work on plain and reinrced concrete. Loaned to Shipping Board for a period of one to two months.
W. H. Wetzler. Salary, $3,300 per year. Graduate of University of Wisconn. Skilled draftsman and engineer. With D. W. Wood, constructing engiers; New York City Water Board; Arnold Co., Chicago; Byllesby Co.; and O. Heyworth.
R. A. Cummings, jr. Salary, $1,500 per year. Graduate civil engineer of le University. He has had two years' experience both in the construction and sign of reinforced concrete.
R. E. Delatush. Salary, $1,380 per year. Draftsman.
C. N. Ernest. Salary, $1,680 per year. Draftsman.
F. G. Fulljames. Salary, $1,800 per year. Draftsman.
W. Frost. Salary, $1,820 per year. Draftsman.
A. B. Galt. Salary, $1,560 per year. Draftsman.
H. E. Paufve. Salary, $1,560 per year. Draftsman.
E. Pompillo. Salary, $1,560 per year. Draftsman.
C. C. Virion. Salary, $1,820 per year. Draftsman.

JAMES O. HEYWORTH.
R. J. WIG.

The CHAIRMAN. I have also here a communication from Mr. Piez ith regard to the preparation of plans for the Jahncke Shipbuildg Co. This letter contains an explanation, which, it seems to me, ght to go in the record.

Senator JONES. Yes; I think it should go in, Mr. Chairman.

The CHAIRMAN. In the absence of objection, the letter will be serted at this point.

(The letter referred to is here printed in full, as follows:)

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, February 6, 1918.

on. DUNCAN U. FLETCHER,
United States Senate, Washington, D. C.

eparation of plans for Jahncke Shipbuilding Co.

MY DEAR SENATOR: Inasmuch as the testimony taken before your committee om Mr. Jahncke and Mr. Guerin of the above committee appears to create a lse impression regarding the preparation of plans for the vessels which are ing built by the Jahncke Shipbuilding Co., indicating that the work on these ans has been stopped by the action of the Fleet Corporation, the actual facts e submitted for your information, as follows:

At the same time as Mr. Ferris was informed that it would not be perlssible for him to carry out the arrangement already made with Mr. Jahncke r the preparation of these plans, Mr. Ferris was directed by Admiral Bowles— d Mr. Jahncke was informed of this action—that the preparation of plans ould be carried out by Mr. Ferris; that the Fleet Corporation would pay r. Ferris the cost of doing this work under the same arrangement made by n. Goethals, namely, drafting organization expenses and 30 per cent.

It was further provided that Mr. Jahncke would reimburse the Fleet Corpotion to the amount paid Mr. Ferris as determined above.

The only change made in the original arrangement was that Mr. Jahncke ould be charged merely with the cost of the preparation of the plans as deibed above in place of the sum that had been agreed with Mr. Ferris for preparation of the plans, and that Mr. Jahncke should pay the Fleet Corration instead of Mr. Ferris.

The Fleet Corporation communicated with Mr. Ferris over the telephone terday and learned that the work on the plans is proceeding according to arrangements made, and that there has been no holdup or delay whatsoever this work.

Very truly, yours,

CHARLES PIEZ,
Vice President and General Manager.

STATEMENT OF COMMANDER PAUL L. REED, CIVIL ENGINEER, UNITED STATES NAVY.

The CHAIRMAN. Will you please state your full name and your occupation?

Commander REED. Paul L. Reed, Civil Engineer, United States Navy.

The CHAIRMAN. Where are you located now, Commander Reed?

Commander REED. I have been given additional duty with the Compensation Board of the Navy, and I am about to be relieved of my work at Hog Island.

Senator NELSON. You are stationed at Hog Island?

Commander REED. I have been stationed at Hog Island; yes, sir.

Senator NELSON. How long have you been at Hog Island?

Commander REED. Since the middle of September, 1917.

The CHAIRMAN. What is your rank or title?

Commander REED. My title is Civil Engineer, United States Navy, with the rank of commander.

The CHAIRMAN. And you have been stationed at Hog Island since September of last year?

Commander REED. Since the middle of September; yes, sir.

The CHAIRMAN. What have been your duties there?

Commander REED. I have been acting as the representative of the division of shipyard plants of the Emergency Fleet Corporation, and my title has been resident engineer.

The CHAIRMAN. Did you have daily contact, or frequent contact, with the work there? Were you on the ground and looking after the operations there constantly?

Commander REED. Yes, sir. I spent most of my time in the office in Philadelphia—the office of the American International Shipbuilding Corporation, who have the contract for the construction of ships, and I was represented at Hog Island by Mr. Towle, who is here with me to-day.

The CHAIRMAN. Mr. Towle was your representative at Hog Island, was he?

Commander REED. Yes, sir. He was stationed there all the time.

The CHAIRMAN. Commander Reed, please state what was done while you were there; what was accomplished; how the work went on and give to us a general idea about the beginning of it, and how it developed.

Commander REED. The whole story of the contract, do you mean?

The CHAIRMAN. Yes; but more particularly with reference to the work and what was actually done there?

Commander REED. The American International Shipbuilding Corporation had a contract with the Emergency Fleet Corporation for the construction of a number of merchant ships, and as a part of that contract they were required to build a shipyard in which to build these ships. This contract, after several months' negotiation, was signed on September 13, 1917, and on September 15 they sent a force of surveyors to the island to lay out the roads, the principal works, and arrange for the building of the ways——

Senator JOHNSON (interposing). Will you pardon an interruption, Commander Reed?

included in the charter of the American International Cor-
ı; that they found it better to organize a subsidiary corpora-
l call it the "American International Shipbuilding Corpora-

or JOHNSON. When, if you know, or approximately when,
American International Corporation formed?
nander REED. My impression is that it was formed coin-
with the signing of the contract.
or JOHNSON. That would be September?
nander REED. September, 1917.
or JOHNSON. Yes. Now, are you not in error, Commander
s to the contract? Was not the only contract that the Gov-
t had made with the American International Corporation?
nander REED. I think you are right, Senator, on that. The
t was made, but the legal proceedings by which it became
red to the American International Shipbuilding Corporation
tside of my line, and I really do not know about that.
or JOHNSON. Yes; but was not the only entity the American
tional Corporation?
nander REED. That is my impression that that was the case,
e time that the contract was ready for signature; whether it
ally signed that way, I am not sure.
or JOHNSON. Well, if it were actually signed with the Ameri-
ernational Corporation, how was it possible for you to deal
other corporation, the American International Shipbuilding
tion?
nander REED. There was no change in personnel; the same
etly——
or JOHNSON. I see.
nander REED (continuing). Represented the American Inter

Senator JOHNSON. Well, do you know whether or not the rights of the American International Corporation were transferred to the American International Shipbuilding Corporation?

Commander REED. I could not say as to that.

Senator JOHNSON. The contract, I think, was made in September, 1917; and the only contract, at least that has been produced before this committee, is the contract that was entered into between the American International Corporation and the Shipping Board, or the Emergency Fleet Corporation.

Now, what I want to get at is, when and under what circumstances and, so far as the Government is concerned, how it came about that you dealt then substantially exclusively with another and a different corporation, the American International Shipbuilding Corporation?

Commander REED. I am sorry that I can not tell you; I do not know.

Senator JOHNSON. Well, I assume, Commander Reed, that you were put in that particular territory by your superiors to do specific work in respect to the yard; and doubtless you had little or nothing to do with the matter of the individuals with whom you were dealing, or the legal effect of various corporations and the like?

Commander REED. That is correct.

Senator JOHNSON. You see, up to this time, Mr. Chairman—and that is the reason for these queries—the only thing that has been related to this committee, either by the Shipping Board or by anybody connected with it, concerns a contract entered into on the 13th day of September, 1917, between the American International Corporation and the United States Shipping Board Emergency Fleet Corporation; and until now—until this day, indeed—personally I was not aware that the Government was dealing with a subsidiary and another corporation entirely, the American International Shipbuilding Corporation. I will ask you, Commander Reed, do you know anything about where that corporation, the last-named one, was incorporated?

Commander REED. No, sir.

Senator JOHNSON. Do you know anything about the details of its incorporation?

Commander REED. No, sir.

Senator JOHNSON. Do you know whether or not the purpose of it was to take over the contract of the American International Corporation?

Commander REED. I am strongly of that impression, that that was what it was done for.

Senator JOHNSON. As a matter of fact, you know that it did, and that it, the second corporation—the American International Shipbuilding corporation—was the one in full management, control, operation, maintenance, and direction of the shipyard, and of all of the matters pertaining thereto.

Commander REED. Yes, sir.

Senator JOHNSON. Pardon me for interrupting; I do not wish to further interrupt your relation of the facts.

The CHAIRMAN. The company had offices in Philadelphia, did it?

Commander REED. Yes, sir; they had offices at 140 North Broad Street; two stories in an office building.

The CHAIRMAN. What kind of a force did they have in those fices?

Commander REED. They had a large force of engineers, clerks, enographers, and the principal executives of the company had eir offices there.

The CHAIRMAN. Were they all occupied with this work—building this shipyard at Hog Island?

Commander REED. Yes, sir.

The CHAIRMAN. And you had your offices in the same building?

Commander REED. I had my offices with theirs; a part of their pace was assigned to the Government representatives there.

The CHAIRMAN. Now will you proceed and state what they did fter the contract was signed on the 13th of September; you went ver there, and you went on with this work. What had been done hen?

Commander REED. At that time they had prepared a general plan f the yard; had made a very approximate estimate of the cost; and ad decided that they would need 50 shipbuilding ways to complete their schedule of ships; and had determined on the principal heads of departments who would carry on this work.

They immediately telegraphed to the people with whom they had been in corespondence, and very rapidly organized and perfected—or, at least, found a very large organization there; they started building roads to get into the island, which they had not had before. They built railroads, to get better access for the freight to be brought in; they built buildings for offices, tool rooms, etc.

Then they brought together about 10 contracting firms to whom they gave subcontracts for different portions of the work. All of these firms were concerns that were well known in their own fields and had handled big work before.

Senator JOHNSON. Can you name some of them, please?

Commander REED. Certainly.

The Jarrett-Chambers Construction Co. were given 10 shipbuilding ways—but let me preface that by saying that the 50 ways were divided, first, into five groups of 10 ways each, and each group of 10 ways was sublet to a separate contracting firm. The first was the Jarrett-Chambers Co.; the next was the Raymond Concrete Pile Co.; the next was the Snare & Triest Co.; the next was Hugh Nawn.

Senator JOHNSON. How do you spell that name?

Commander REED. N-a-w-n. And the next was Arthur McMullen. They contracted with the Bates & Rogers Construction Co. for the railroad tracks.

Senator JOHNSON. With what company?

Commander REED. The Bates & Rogers Construction Co. They contracted with the Ulen Contracting Co. for the water pipes and the sewer pipes; with the Kellogg Construction Co. for compres-ed-air pipes, and made a number of other minor contracts with various contracting people who were used to that kind of work. They contracted with Holbrook, Cabot & Rollins, of Boston.

Senator JOHNSON. Holbrook what?

Commandeer REED. Holbrook, Cabot & Rollins, of Boston, for the iers in the fitting-out basin. That was practically the largest con act of all, I think.

The CHAIRMAN. Were there any officers or agents or representatives of the American International Corporation at work there, in those offices or about the work, not included in the list of overhead officers or employees whom the Government was paying?

Commander REED. The Government pays all employees, every one on the work, with the exception of the executive officers of the American International Corporation and the American International Shipbuilding Corporation. At present, Mr. Robinson, Mr. Muhlfeld, one of the executive committee, and Mr. Connick, who is also a member of the executive committe of the American International Shipbuilding Corporation; and Mr. England, who is, I believe, the treasurer of Stone & Webster Corporation, have given their time without direct payment by the Emergency Fleet Corporation.

The CHAIRMAN. Were they there and occupied with this work?

Commander REED. A very large part of the time. Mr. Robinson has been there quite constantly, and Mr. Muhlfeld also. Mr. Robinson and Mr. Muhlfeld have both devoted a great part of their time to it.

Senator NELSON. All the other men employed there, except these men whom you have named, were paid by the Emergency Fleet Corporation?

Commander REED. Yes, sir.

Senator VARDAMAN. Who did you say did the subcontracting? Who let the contract with those various companies?

Commander REED. The American International Shipbuilding Corporation let those contracts; it sublet those portions of the work to other contracting firms.

Senator VARDAMAN. Does the Government pay the men employed by each one of the separate companies?

Commander REED. Practically speaking, the American International Shipbuilding Corporation carried all the men on its rolls. It employed the subcontractors to obtain their plant, and to obtain their superintendence; but they furnished all the material except the plant. That is, all the material that went into the work was furnished by the American International Shipbuilding Corporation, and of course, therefore, the Emergency Fleet Corporation paid for it.

The CHAIRMAN. Did you pass on the question of locating slips and the plan of yard, and that sort of thing?

Commander REED. I passed on the details of it; the general plan had been approved at the time the contract was awarded in Washington, and subsequently a somewhat more detailed general plan was approved by my superior, Admiral Rousseau, who is the manager of the division of shipyard plants of the Emergency Fleet Corporation.

The CHAIRMAN. Then what did you particularly do?

Commander REED. It was my duty there to approve all detail plans, all orders for materials, and all subcontracts that were made; that is, to examine them, to act upon them, and they were not in effect until I did approve them.

Senator NELSON. Mr. Piez, in his report states, paragraph 5:

> Material seems to have been ordered without that regard for actual needs and existing facilities of handling it, that is necessary to prevent undue congestion of railroads leading to the plant.

What have you to say about that?

Commander REED. I concur fully in that; that is they organized a large and an efficient purchasing force, gave them their orders that they would have to have certain materials delivered on certain dates; and this purchasing department proceeded to place orders and arrange for deliveries and speed——

Senator NELSON (interposing). Did you not pass upon those?

Commander REED. Yes, sir.

Senator NELSON. Well, did you try to check the importation of material faster than you could make use of it? Did you try to put a brake on it, so as to prevent the yard from being congested with materials?

Commander REED. No; I felt that they would need these materials at the time that they stated to complete their ships when they had agreed to complete them.

Senator NELSON. Well, do you not know that they ordered material there faster than they could use it, and that it became piled up there and congested?

Commander REED. No, sir; I would not say that. I think that it was necessary to place the orders substantially as they did, particularly in view of the freight situation and the congestion in the shops all over the country; that they had to be foresighted and place the orders for material.

Senator NELSON. Do you think it was necessary to have the plant there congested with materials for those reasons?

Commander REED. No, sir; I would say I think they were late in getting ready for it at the yard; that is, that they were not able to get the yard ready to receive those materials as fast as the materials were needed to meet the construction program.

Senator NELSON. Well, do you not think it was a mistake to order the materials before the yard was ready to receive them and have them piled up there helter-skelter?

Commander REED. I think that was a mistake to have that material there, in view of the condition of the yard.

Senator NELSON. That was one of the mistakes that was made?

Commander REED. Yes, sir.

Senator NELSON. Did you do anything to correct that mistake?

Commander REED. When it became evident that they would not be able to handle material as fast as it was coming in we did take steps to have them hold back shipments; that is, some of the shipments of material that were to be made at a certain date were held back.

Senator NELSON. Well, what was the character of that material that was piled up there and became congested? What was it made up of?

Commander REED. In the beginning, [illegible] was the principal [illegible] and miscellaneous [illegible] a large amount of material of all kinds: boilers and engines——

Senator NELSON (interposing). Plant?

Commander REED. No—plant——

Senator NELSON. Plant?

Commander REED. Yes, sir; [illegible] the yards lumber came in faster than they could use it [illegible] certain kinds of lumber—heavy timber——

Senator NELSON. What did you do with that surplus of materia when you got it in in such abundance?

Commander REED. Most of it was left on the cars, until it coul be unloaded, because there was a great congestion——

Senator NELSON (interposing). How long did you keep it on th cars?

Commander REED. I suppose some of the material was kept a much as two weeks.

Senator NELSON. Well, how many cars did you keep in that con dition?

Commander REED. That is a hard question to answer directl because the railroads put as many cars onto the island as they coul take, and then they banked up other cars in adjoining yards aroun Philadelphia; and then, when they found this material was not bein unloaded, they held cars back in more distant yards. They hav had right along between 3,000 and 4,000 cars rolling toward Ho Island; some of them were held along the way; some of them a Hog Island.

The CHAIRMAN. Did the cars arrive sooner than you expecte they would arrive?

Commander REED. No; I do not think so; they did not.

The CHAIRMAN. It looks as though, unless you thought there would be delay in transporting this material, there was a grave mistake in ordering it before you were ready for it.

Commander REED. Well, the feeling was that they had undertaken a stupendous and unprecedented contract; no such amount of work in the way of building ships had ever been undertaken under any such conditions.

Senator NELSON. Since the days of Solomon. [Laughter.]

Commander REED. They agreed to do approximately $200,000,000 worth of work, on what was a barren island, in two years; to build a plant to do the work in; and then to build the ships. I was never asked as to whether I thought that could be done.

Senator NELSON. Who was your next superior officer? Whom did you take your orders from?

Commander REED. Admiral H. H. Rousseau.

Senator NELSON. Was he the chief man there representing the Shipping Board?

Commander REED. No, sir; he was in charge of my division, the division of shipyard plants in the Emergency Fleet Corporation, in Washington.

Senator NELSON. He remained here in Washington?

Commander REED. Yes, sir.

Senator NELSON. He was not up there?

Commander REED. No. I had no immediate superior at Philadelphia.

Senator NELSON. No; you had charge of the things there?

Commander REED. As regards the plant.

Senator NELSON. Now, could you not have checked and prevented some of this congestion of materials from coming in there as it did, in your capacity—did you not have the power to veto it?

Commander REED. I never felt that they were ordering the material too fast. We found that they were not able to take care of it

when it got there, but I thought it was necessary, if they were going to get these ships in any such time as they had agreed to get them in—they would have to have that material as it came; and I never, in the early stages, felt that I should hold back anything. The point was to get——

Senator NELSON (interposing). To get the stuff piled up there?

Commander REED. To get the ships. But the defect that struck me was that they were not getting the yard in shape fast enough to take this material.

Senator NELSON. Now, I want to call your attention to this: Mr. Piez, in his report, in the sixth paragraph, says:

> In the desire for speed, men have been taken on in such great numbers that the supervising staff was unequal to the task of effectively directing the workers, with the consequent great loss of output and efficiency. Lower cost, and at least equal, if not greater, progress, would have been made if the working force had been kept down to more moderate proportion.

Now, what have you to say as to that? You have been right there all this time on the ground. What have you to say as to that paragraph of Mr. Piez's report?

Commander REED. I can say this, that the work would have been done more economically with less men. I do not know——

Senator NELSON (interposing). Did not the same conditions exist in reference to piling up men there that existed in regard to piling up material?

Commander REED. Very similar; yes, sir.

Senator NELSON. Yes. You first congested your plant with material that you could not use and then you congested your plant with men that you could not use?

Commander REED. Yes, sir.

Senator NELSON. Now, did you try, as the representative of the Government, to remedy that and to put a stop to it?

Commander REED. We tried to.

Senator NELSON. Whom do you mean by that?

Commander REED. I——

Senator NELSON (interposing). I asked if you did anything?

Commander REED. Yes. I noticed very early in the progress that the work was not being done economically; that there was a good deal of waste and inefficiency in the handling of the work, and the endeavor was to get these men organized.

Senator NELSON. When you noticed that did you report the fact to your superior officer?

Commander REED. Yes, sir.

Senator NELSON. Did you report that there was [illegible] and that there was more of a labor force [illegible] to work? Did you report that to Admiral Rousseau?

Commander REED. No, sir; I did not [illegible] they could put to work; but [illegible] gram to build up a very large force [illegible]

Senator NELSON. Yes.

Commander REED. And they [illegible] ployed anyone who came there. The [illegible] getting away were most [illegible] no adequate transportation [illegible]

day or two and then quit, because they did not like the conditions there; and they built up a force in——

Senator NELSON (interposing). Well, do you not think, with those conditions, that it was foolish to have a greater force of men than you could adequately employ?

Commander REED. No; I felt that we had to have the men.

Senator NELSON. You still hold it was necessary to have a big lot of men swarming around?

Commander REED. I did; yes, sir. I did not feel that I was in a position to tell them that they should slow up.

The CHAIRMAN. When did they get this excess of labor—about what time?

Commander REED. They started right in at the beginning getting all the men they could; and they organized an employment department, a large department, and a very aggressive one, I think, to get men, to hire them and watch what they were doing and to build up the force; and they built up the force to something over 20,000 men in four months, which was also, I presume, almost an unprecedented thing to do.

Senator VARDAMAN. Many of those men were crude and untrained, were they?

Commander REED. A large number; yes, sir.

Senator VARDAMAN. Was it your purpose to bring in this large number of men in excess of what might be needed in order that you might train them for the work?

Commander REED. A very large percentage of the work at that time was common labor; any man that was able to work was put on.

Senator VARDAMAN. The Government was paying all of those expenses?

Commander REED. Yes, sir.

Senator VARDAMAN. And there was no economy practiced, then? Your purpose was to bring a large number of men together for the purpose of building ships, without regard to cost, I presume?

Commander REED. At all stages cost has been distinctly secondary. It has been recognized, I think, by everyone there that if they could take more time they could undoubtedly do it cheaper; there is no question about that.

The CHAIRMAN. Did not the corporation proceed to sublet the driving of the piles, the building of the ways, the railroad, the street cars, and the roads, and other things of that kind?

Commander REED. Yes, sir.

The CHAIRMAN. What did they do with the labor which they employed, if they sublet this work?

Commander REED. You understand that they employed all the labor direct, and detailed those laborers to those different contractors. But aside from that the American International Shipbuilding Corporation itself did a large amount of work with its own direct employees.

The CHAIRMAN. What did they do?

Commander REED. All wooden buildings were built by them.

The CHAIRMAN. What wooden buildings did they erect?

Commander REED. Why, I should say there were several hundred of them. They erected a great many temporary buildings, for

ınd tool houses; and they erected barracks for the laborers to
some 4,000 men, I think, they have provided for; they have
mess halls, storehouses, warehouses.
:HAIRMAN. Are those barracks occupied by the men who are

ıander REED. Yes, sir.
:HAIRMAN. Four thousand or five thousand men in barracks
ground?
ıander REED. Yes, sir.
:HAIRMAN. On the island?
ıander REED. Yes, sir.
:HAIRMAN. And they are still there, and still occupying those
s?
ıander REED. Yes, sir.
:HAIRMAN. And the other men have to come in by railroads
et cars?
ıander REED. Railroads, street cars, and boats; they operate

or NELSON. Do you house and take care of some of the men

ıander REED. Yes, sir; as I said, they take care of some 4,000
men.
or NELSON. Were you there when they first started opera-

ıander REED. Yes, sir.
or NELSON. You are familiar with the topography of the
!
ıander REED. Yes, sir.
or NELSON. It is called an island, but it is really a sort of
la, is it not, jutting out into the river?
ıander REED. It is hardly that; it is practically on the main
it there is a back channel, a little channel, that, by a circuit-
es around and gradually comes around to——
or NELSON (interposing). What was the character of that
before any improvement was made there—what is now
Hog Island?
ıander REED. It was originally a tidal marsh.
or NELSON. A tidal marsh?
ıander REED. Yes; upon which had been pumped in the past
ot of gravel, by hydraulic dredges, in connection with the im-
nt of the Delaware River.
or NELSON. Yes. Was the island covered pretty well with
nped material?
ıander REED. I should say perhaps one-half of it.
or NELSON. There are about 100 acres in the island, or sup-
be?
ander REED. Yes, sir.
or NELSON. And it is claimed that the company bought it for
ion six or seven hundred thousand dollars; is that correct?
ander REED. Yes, sir; it cost about $2,000 an acre.
or NELSON. $2,000 an acre for that land?
ander REED. Yes, sir.

Senator NELSON. Well, do you not think that is an awful for land of that kind—tide land covered with gravel taken by boats along the river? Was there any town near it? Was there village or town around the island?

Commander REED. Hog Island is about 8 miles from Phil phia; there is no town near by except the outskirts of Philadelph

Senator NELSON. The suburbs?

Commander REED. The suburbs of Philadelphia.

Senator NELSON. How far was it from the suburbs of Phil phia?

Commander REED. There is no development within about 3 of it.

Senator NELSON. Was there any street car connection before got up there? Was there railroad or street car connection with Island?

Commander REED. Street cars were within 3 miles or a nearer.

Senator NELSON. There was no railroad there?

Commander REED. The Pennsylvania Railroad had an exten which they proceeded at once to take to Hog Island; it was a pa the understanding, I think, that if they got the contract the Pen vania Railroad would bring the railroad there, and they brought railroad there very promptly.

Senator NELSON. There was no railroad at that time?

Commander REED. Not right then; no, sir.

Senator NELSON. And yet, under those conditions, the price that Hog Island was $2,000 an acre in that condition?

Commander REED. Yes, sir.

Senator NELSON. Away out, 8 miles from Philadelphia, 3 from any car connection, and having no railroad connection at time. Were there any buildings of any kind on Hog Island—I before the Government commenced?

Commander REED. There was an old ferryhouse there which been used by boats to take people to a resort across the river.

Senator NELSON. What was the first thing you had to do at Island to make any use of it?

Commander REED. The first thing we had to do at Hog Island to build a road, a hard-surface road, in there to carry——

Senator NELSON (interposing). From where?

Commander REED. From the nearest good road out of Phila phia.

Senator NELSON. They built a macadamized road?

Commander REED. Yes, sir.

Senator NELSON. Did it have more than one track?

Commander REED. No, sir; at that time they just built one. It wide enough for teams to pass.

Senator NELSON. What next did you do after building that ro

Commander REED. They built houses simultaneously with building of that road. They built little buildings for offices for men and mess halls, eating houses, and little storerooms, tool ro

Senator NELSON. Those mess halls were for the officers?

Commander REED. Yes, sir.

Senator NELSON. Not for the laborers?

Commander REED. Well, the mess hall was for the men—the original buildings were for the men and the foremen.

Senator NELSON. What were they chiefly—lumber shacks?

Commander REED. Yes, sir.

Senator NELSON. Well, what next did you do?

Commander REED. Then they built more roads—plank roads. They found it not the cheapest, but the quickest way to get roads, to lay down 3-inch planks, and they built those.

Senator NELSON. Over the island, or down to the island?

Commander REED. They built this macadam road down to the island, and then on the island they built these plank roads.

Senator NELSON. Plank roads?

Commander REED. Yes, sir. They started very early on the building of the ways—50 shipbuilding ways. They let these contracts to these five subcontractors, each one with 10 ways, and these subcontractors proceeded to get in their plant and start to driving piles for these shipbuilding ways.

Senator NELSON. Yes; and they all started in at the same time, did they, on the 10 subcontracts?

Commander REED. Practically so: yes, sir. They followed along a week or two apart.

Senator NELSON. There were 10 ways in each contract?

Commander REED. Ten ways in each group.

Senator NELSON. Ten ways in each group, and they all started at the same time?

Commander REED. Practically so: within two or three weeks.

Senator NELSON. When did they get the ways ready?

Commander REED. They are not finished yet.

Senator NELSON. Are any of them finished?

Commander REED. None of them are finished.

Senator NELSON. Are they all in about the same state of completion?

Commander REED. No, sir: some of them are almost to the point where they could start building a ship on them.

Senator NELSON. How many of them are in that [illegible]?

Commander REED. Oh, I should say about five.

Senator NELSON. Five out of the ten?

Commander REED. I should estimate that.

Senator NELSON. Fifty that are [illegible]?

Commander REED. Yes, sir.

Senator NELSON. And the balance of the ways [illegible] completion are they?

Commander REED. They are in [illegible] been started. I should say there were [illegible] nothing done on them.

Senator NELSON. Twelve.

Commander REED. Twelve [illegible]

Senator NELSON. Do you not [illegible] many ways simultaneously [illegible] tended to delay rather than [illegible]

Commander REED. [illegible] ting in materials [illegible] ways to five different [illegible]

tractor would go ahead with his own work, and that they would al progress together. But the delay has been largely in getting materia to these 50 ways; to spread out this material as it comes in ove all this work.

Senator NELSON. Yes; that has been the delay?

Commander REED. Largely.

Senator NELSON. Well, do you not think they would have bee wiser, that it would have been better policy, in order to get to th point of building ships, to confine their operations in the first instanc to the erection of, say, 10 or 20 ways, instead of going into the whol number at once?

Commander REED. It seems so to me; yes, sir.

Senator NELSON. Yes. Well, who had direction of that work?

Commander REED. The American International Shipbuilding Corporation; it is what they call an "agency contract."

Senator NELSON. Well, that is a dummy of the American International Corporation?

Commander REED. Yes, sir; it is a subsidiary.

Senator NELSON. Yes; it is getting around the fact that the other corporation is really entitled to build ships, I suppose.

Commander REED. I do not know anything about that.

Senator NELSON. Yes; I suppose that is the reason. Do you remember how many piles they contemplated driving?

Commander REED. There are approximately 130,000 piles.

Senator NELSON. Well, how many have been driven?

Commander REED. I would say 30 per cent have been driven.

Senator NELSON. Thirty per cent. Now, what have you to say about this part of Mr. Piez's report? Here is what he says:

> The cost of driving 16,252 piles up to December 31 was $513,163, against an estimated cost of $89,386, or an increase of 574 per cent in the cost of driving those piles.

The estimated cost was $89,000; and the actual cost was $513,000. Now, how do you account for that?

Commander REED. The actual cost of the assembling of the plant and the labor of driving piles was all totaled thus to December 31, and the number of piles was counted, and one divided by the other, and it gave a certain amount per pile.

Senator NELSON. Well, that is explaining the mathematical method; but my question was, How do you account for the cost?

Commander REED. Yes; I was going to explain a little further, that the cost of the plant by that method was distributed only over the portion of the piles that were driven; and as they go ahead and drive more piles the same initial cost of preparing the plant will be counted, and that will reduce somewhat the average cost of the piles. But after it is reduced the price will still be high—much higher than the estimates.

Senator NELSON. Did you have to do much grading of the ground on Hog Island?

Commander REED. Yes, sir; a great deal of grading.

Senator NELSON. How many feet, or inches, did you have to raise the body of the island by grading?

Commander REED. There was no wholesale raising in that way; it was a case of filling up depressions and taking off higher places.

ander REED. Eight miles.
r RANSDELL. Is it in the limits of the city of Philadelphia?
ander REED. No, sir; it is just outside the limits.
HAIRMAN. With regard to the matter of piles, about which
been asked question, there is a statement in the report of
about the expected cost of driving those piles. In the
of that cost was the cost of the plant all figured in, so that
of the plant was charged up to the amount of work done,
f being distributed throughout the whole 130,000 piles?
ander REED. Yes, sir; to some extent; the subcontractors
certain plant with them, and furnished certain plant as a
heir proposition, the cost of which was not included in the
he piles. And they built other plant; they build additional
ers to do the work with, and those additional pile drivers—
of them—would come into the cost of the piles.
HAIRMAN. And that should be distributed over the whole

ander REED. Yes, sir.
HAIRMAN. But in estimating the cost of the work up to date,
actually done?
ander REED. In the report from which that is extracted
rly explained how that was arrived at, and that it would
ed somewhat as the work progressed.
r NELSON. Now, was that piling done by subcontractors?
ander REED. Yes, sir.
r NELSON. Was it done by piecework, at so much per pile?
ander REED. No, sir: it was all done by day labor.
r NELSON. All done by day labor and paid for as day labor?
ander REED. Yes, sir.
r NELSON. What was that labor paid: how much a day?

Commander REED. They were paid as high as 62½ cents an hour.

Senator NELSON. An hour?

Commander REED. Yes, sir. I presume there were some paid mo than that. The engineer on the pile driver might have received high as 70 cents. I think that was about the maximum.

Senator CALDER. Commander Reed, were those men employed i pile driving employed directly by the Emergency Fleet Corporatio or were they supplied by the subcontractor?

Commander REED. No, sir; they were supplied by the America International Shipbuilding Corporation, who furnished all the con mon labor, practically all the labor, to the subcontractors; at leas the men were carried on the rolls of the American Internation Shipbuilding Corporation.

Senator CALDER. What I am trying to ascertain is, if there was n a profit in between for somebody on this layout?

Commander REED. No, sir; there was no profit in between.

Senator CALDER. So that the prices paid for that labor we directly to the men, and there was no profit for anybody else?

Commander REED. Yes, sir; that is correct.

Senator JOHNSON. What was the system by which they made the subcontracts?

Commander REED. The subcontractors were given a fixed fee, whic was determined in the beginning and was found by taking a pe centage of the estimated cost of the work, approximately, 5 per cen that varied in different contracts. Each contract was negotiate by itself, but in general, the subcontractor received a fixed fee o 5 per cent of the estimated cost of the work.

Senator JOHNSON. Would those subcontracts be made by th American International Shipbuilding Corporation, or by your co poration, or by the Government?

Commander REED. No, sir; they were made by the America International Shipbuilding Corporation.

Senator JOHNSON. Were those contracts submitted, after they we made, to your corporation, the Emergency Fleet Corporation?

Commander REED. Yes, sir; they were submitted to us for a proval—to me directly, as representing the Emergency Fleet Co poration, for approval.

Senator JOHNSON. Are those contracts on file, do you know? Ha you copies of them?

Commander REED. Yes, sir.

Senator JOHNSON. Was there ever any instance in which a contra was submitted by the American International Shipbuilding Co poration that was rejected by you?

Commander REED. A number of them were returned explainin why we did not like certain features of them.

Senator JOHNSON. That is, in relation to minor details?

Commander REED. Not always.

Senator JOHNSON. Explanations would be forthcoming, and the they would be accepted?

Commander REED. They were changed frequently to meet o views?

Senator JOHNSON. Was there ever a single contract that was su mitted by the American International Shipbuilding Corporation th was wholly rejected by the Emergency Fleet Corporation?

nander REED. I think not.
or JOHNSON. And were all of those contracts upon the fee the subcontractor?
nander REED. There is a field in between an ordinary purchase contract; for instance, there was what you might call either ntract or an order for structural steelwork for the buildings steel company at so much per pound; in that sense there was sum price, or a price per pound.
or JOHNSON. Who selected the steel company from which the e of steel was made—the American International Shipbuild- ?
nander REED. The American International Shipbuilding Co. d bids in every case—I do not like to say in every case, be- ere were some small, mostly emergency contracts where they obtain bids for a small amount of material or repairing a something of that kind; but in general, they were very care- btain competitive bids from at least three dealers or manu- rs for anything they wanted; and those bids were all sub to me for approval before any award was made.
or JOHNSON. And they selected the three companies from hey would obtain the bids?
nander REED. They selected the companies, yes, sir, although ays had the option of suggesting anybody that we thought ght well go to.
or JOHNSON. Did you make any suggestions?
nander REED. We did quite often; yes, sir.
or JOHNSON. Did you know the particular firms from whom ntracted first for the five groups of ways?
nander REED. I know of them, either personally or by repu as being very well-known contractors.
or JOHNSON. Did you know the individuals who composed rms?
nander REED. I knew a number of them; I would say I knew the men in about half of them.
or JOHNSON. Have any of those firms [illegible] contracted with, ates interlocking with the directorate of the American Inter l Corporation or the American-International [illegible] ation?
nander REED. The case of one I know [illegible] Mc k, of Holbrook, Cabot & Rollins [illegible] officer American International Corporation.
or JOHNSON. And [illegible] for piers?
nander REED. That was the [illegible]
or JOHNSON. The same [illegible] e Holbrook, Cabot & Rollins [illegible]
nander REED. Yes, sir.
or JOHNSON. And how much was that contract [illegible]
nander REED. The [illegible] a half dollars [illegible]
or JOHNSON. And how [illegible]

nander REED. They were [illegible] e made a good start in the work

Senator JOHNSON. Now, Mr. Holbrook, who is the head of that particular large concern, is also a director, I understood you to say, of the American International Corporation?

Commander REED. His name is given as a vice president of the American International Corporation on page 367 of these hearings.

Senator JOHNSON. Is the concern known as the Holbrook, Cabot & Rollins Co. in any degree connected with Stone & Webster?

Commander REED. Not to my knowledge; I do not know that they have any connection.

Senator JOHNSON. That particular contract was upon the basis of a fee?

Commander REED. Of a fee; yes, sir.

Senator JOHNSON. Now, as to the pile contract, which seems to have reached an extraordinary sum in the matter of expense, who were the gentlemen composing that particular corporation, do you know?

Commander REED. The cost of pile driving under all those five groups of ways has been high; they have all been high; some have been higher than others.

Senator JOHNSON. Yes; that is obvious from the report of Mr. Piez. But who were the gentlemen who composed the Raymond Concrete Pile Co., for instance?

Commander REED. I am not personally acquainted with the personnel of that company; so far as I know, it is not connected in any way with Stone & Webster or the American International Corporation.

Senator JOHNSON. Where is its principal place of business?

Commander REED. In New York City.

Senator JOHNSON. New York; its directorate you are not familiar with?

Commander REED. No, sir.

Senator JOHNSON. You are the officer, are you not, who gave the unit of cost stated in the report?

Commander REED. Those figures were prepared by Mr. Towle, who is the plant engineer, and who went to the books of the American International Shipbuilding Corporation for them and compiled them.

Senator JOHNSON. When your lumber came in too fast, as you have described, were any complaints made to you by other industries in the country about the taking of lumber from those industries and letting it remain idle there at Hog Island?

Commander REED. I heard no complaint of that. The great majority of it was furnished by the purchasing department of the Emergency Fleet Corporation, who placed the orders for the American International Shipbuilding Corporation in the South, in mills, which they had——

The CHAIRMAN (interposing). Did all that piling and lumber come from the South?

Commander REED. Yes, sir; practically all of it.

Senator JOHNSON. How many carloads lay idle there for the period that you have mentioned?

Commander REED. It is very difficult to say how many—as to where to start counting the cars. There were, approximately, between 3,000 and 4,000 cars on the way to Hog Island from their place of shipment.

Senator JOHNSON. Three or four thousand cars?

Commander REED. All the way from the South working toward Hog Island; some of them were right on Hog Island; others were in yards just outside of Philadelphia; and others were away back, as far as Harrisburg and Baltimore.

The CHAIRMAN. May I ask if any of that material came by water?

Commander REED. Very little by water.

Senator JOHNSON. How many cars would you say were piled up there, unable to be used, at any particular period?

Commander REED. Unable to be loaded?

Senator JOHNSON. Unable to be unloaded, yes—or the material in which could not be expeditiously devoted to the purpose for which it was ordered.

Commander REED. I should say a maximum of, perhaps, 1,200 cars.

Senator JOHNSON. Twelve hundred cars?

Commander REED. And a minimum of—well, the minimum is not pertinent, because they started out without any, of course. I think Mr. Towle, who I understand is to appear before the committee after I finish, can tell you better about that than I can.

Senator JOHNSON. I am asking only for approximations, and anything which you may say as to that you will have the opportunity to correct subsequently. They have run higher than that at times, have they not?

Commander REED. I do not know of any cases where there were more than that which were what you might call ready to be unloaded near by; there were some cars held back.

Senator JOHNSON. Now, that happened with all sorts of materials, did it not?

Commander REED. All sorts.

Senator JOHNSON. And the material lay there for an indefinite period, too, did it not?

Commander REED. For considerable periods, some of it.

Senator JOHNSON. Some of it is still there, is it not?

Commander REED. There was always a large number of cars there.

Senator JOHNSON. I know; but there is material there that was ordered long ago, is there not—lying right there now in the cars?

Commander REED. I do not understand that the same cars have been there for a great while.

Senator CALDER. The same what?

Commander REED. The same cars; as one car was unloaded another would be put in there, so that there is always a large number of cars waiting to be unloaded; not all of them on Hog Island. The case has come up lately where they have not been able to get the cars in, when the unloading forces catch up with the material, and the railroads, with their congestions and their troubles, have not got the cars into the island.

Senator JOHNSON. Who made the estimates of cost originally?

Commander REED. The American International Corporation.

Senator JOHNSON. Well, but did not the Government make estimates of cost, too?

Commander REED. No, sir.

Senator JOHNSON. Do I understand you now—and I repeat it, so that we may be accurate——

Commander REED. Yes, sir.

Senator JOHNSON (continuing). Do I understand you that the o estimates of cost were made by the American International Cor ration?

Commander REED. The original estimate of cost?

Senator JOHNSON. Yes.

Commander REED. Was made entirely by the American Inter tional Corporation.

Senator JOHNSON. Did we start to do this work at Hog Isl with no estimates of cost except those that were made by American International Corporation?

Commander REED. I think that is correct, as regards the shipy

Senator JOHNSON. Is there any instance in which the cost c within any approximate distance of the estimate that was made the American-International Corporation?

Commander REED. Yes, sir; in the case of wooden buildings, actual cost is no greater than the estimate, and in some cases, i less.

Senator JOHNSON. Did that occur as to anything else besi wooden buildings?

Commander REED. That is all that I know of—as to any la labor item.

Senator JOHNSON. Do you recall that the estimated cost was proximately $21,000,000?

Commander REED. I understand $21,000,000 was the figure tal of when the contract was signed; that was the figure which had b more or less formally presented.

Senator NELSON. May I interrupt you, Senator Johnson, and as question at this point?

Senator JOHNSON. Yes; certainly.

Senator NELSON. Mr. Piez in his report says that—

Temporary buildings, temporary telephones, and temporary railroads—

Senator JOHNSON (interposing). I was coming to that point i moment.

Senator NELSON (reading):

For which no provision was made in the estimate, have cost $698,000.

Senator VARDAMAN. Senator, will you permit me to ask him w proportion of the entire cost is covered by those wooden buildi that came so near the estimates?

Commander REED. About 20 per cent of the total cost.

Senator JOHNSON. Well, it was not a large proportion, was it?

Senator VARDAMAN. It was a very small item, was it not?

Commander REED. I would say it was a considerable item; i not among the largest items, but it was a considerable item; th are a very large number of those wooden buildings.

Senator JOHNSON. With regard to what Senator Nelson asked y do you recall that in the report made by Vice President Piez r stated that for these buildings no estimate at all was made; do remember that?

Senator NELSON. Here is what the report says, if I may quot again:

Temporary buildings, temporary telephones, and temporary railroads, which no provision was made in the estimate, have cost six hundred and ni eight thousand and some odd dollars.

What have you to say as to that? What explanation have you o make of that?

Commander REED. Soon after the contract was signed, a tabulated stimate of cost was prepared by the American International Shipuilding Corporation totaling $21,000,000.

Senator NELSON. Yes.

Commander REED. And in that it divided the work into ship ways; housing, and all the permanent structures, so far as any of this is permanent; the part of the plant that was to remain to build ships with. And in that estimate there was no specific reference to these temporary buildings to which Mr. Piez refers: temporary buildings that were built to build the permanent buildings: they where workmen's temporary lunch houses, temporary offices, temporary tool houses, temporary storerooms, that were built to build the plant.

Senator NELSON. And they were never included in the estimate?

Commander REED. They were never included in the estimate as an item; I think it would be hard to say that it was not contemplated that there would be such items, but their cost was supposed to be incorporated in the cost of the structures whose erection they were built to assist.

The CHAIRMAN. Did you check over these estimates of the American International Corporation?

Commander REED. I did, approximately. You understand that when the contract was signed it was a rough estimate of $21,000,000 that was talked of as the probable cost of plant. Soon afterwards, they were asked to submit a definite plan of just what they were going to do, with a detailed estimate of cost, which they did; and in that estimate the cost was $21,000,000; and the unit prices which made up that $21,000,000 I examined, and I considered that they were reasonable unit prices—for example, for 1,000 feet of lumber for a cubic yard of excavation, etc.

Senator VARDAMAN. What did you pay for lumber—the average price of lumber?

Commander REED. Delivered at the yard?

Senator VARDAMAN. Yes.

Commander REED. I should say from $30 to $40 a thousand. But let me explain that: That is the lumber that the Government furnished to us, which is the greater part of the lumber. Some of the lumber was bought locally to enable them to go ahead, because the congestion of the railroads prevented the other lumber coming through; and that local lumber costs more.

Senator VARDAMAN. You spoke of the subcontractor receiving a ee of 5 per cent. Does anybody else receive a commission or a fee or this work?

Commander REED. The fees of the main contract have been exlained—that the American International Shipbuilding Corporation ceives a fee for each ship that it builds.

Senator VARDAMAN. Well, do they not receive a commission on the ork that these subcontractors do?

Commander REED. No, sir; the American International Shipbuildg Corporation receives no compensation, fee, or anything of that id, for the construction of the plant; they build the plant at cost them, whatever it costs them, for nothing.

Senator VARDAMAN. They build the plant, and the Government furnishes the money, and pays for it?

Commander REED. Yes, sir.

Senator NELSON. They do not invest a dollar in the building of the plant, do they?

Commander REED. No, sir.

Senator VARDAMAN. Now, what is the plant going to cost? You estimated it would cost $21,000,000.

Commander REED. That estimate has since been increased by the American International Shipbuilding Corporation to about $27,000,000, and at the rate that the cost is running it will cost considerably more than that.

Senator VARDAMAN. How much? Will it run up to $50,000,000?

Commander REED. I doubt that; I do not think it will run as high as that.

Senator VARDAMAN. How much do you think it will run?

Commander REED. There is another feature that comes in there: The Emergency Fleet Corporation is suggesting that some of that plant be held back; that perhaps they will not need 50 ways, and perhaps not as much of railroad tracks, etc., as have been estimated: and they are asking them not to proceed with some of that work until they see whether it is really needed.

Senator VARDAMAN. Has any work been done on the plant, and particularly on those 50 ways, that they will have to tear up or tear down if they do not use it?

Commander REED. My recollection is that there are about 12 ways that there has not been anything done on, and 18 altogether that they have done very little work on. They have been asked to defer work on those 18 ways until they find out that they are really necessary.

Senator VARDAMAN. If they should change the plan what would be the property loss to the Government? That is, for the work that is already done that will not be used?

Commander REED. To change it to the extent that I mentioned?

Senator VARDAMAN. Yes.

Commander REED. There will be very little loss I think.

Senator VARDAMAN. You could not give the committee an estimate of the probable cost now?

Commander REED. I would not dare say.

Senator VARDAMAN. It would be more than twice as much as the original estimate, do you not think?

Commander REED. I do not think it will be twice as much, taking everything into consideration. The pile driving seems, certainly to cost more than twice as much.

The CHAIRMAN. When did they make these estimates?

Commander REED. Why, they made a very rough estimate before the contract was signed, and then they worked them out in more detail about a month after the contract was signed; and then perhaps a month after that they made new estimates, or, rather, carefully reviewed the estimates, based on additional information they obtained and prices that they were getting on materials, and reached the conclusion that $27,000,000 was the proper figure.

The CHAIRMAN. What I have in my mind is, if they made these estimates based upon the assumption that they would do the work

ptember, the estimates would likely be lower than if they knew
ıad to begin this work in the wintertime?
nmander REED. They did begin in September.
ıator NELSON. They began the work in September?
nmander REED. Yes, sir.
ɜ CHAIRMAN. I know; but they did not do very much in Sep-
:r, although they got there along in September.
nmander REED. The contract was signed in September.
ɜ CHAIRMAN. It was signed on the 13th of September?
nmander REED. Yes, sir.
ɜ CHAIRMAN. And they got there on the 15th of September and
ı to organize?
nmander REED. Yes, sir.
e CHAIRMAN. The question is, can they not do that sort of work,
uilding of a plant, much cheaper in the summer months than
can in the winter months?
nmander REED. Absolutely; very much cheaper.
e CHAIRMAN. The winter coming on has had the effect of in-
ing the cost, has it not?
mmander REED. Very much, sir.
ıator HARDING. Commander, will you tell me if the contract
ts of changes in plans and limitations of construction on the part
e Emergency Fleet Corporation?
mmander REED. Yes, sir; it does. The American International
building Corporation is in the hands of the Fleet Corporation
ery stage, I take it.
ıe CHAIRMAN. That is, the Fleet Corporation has control of this
construction?
ımmander REED. It has it so far as it cares to exercise it di-
y; it has the power to direct anything to be done or not to be
.
nator HARDING. Then, if there has been any inordinate extrava-
e in construction, the blame must be shared at least by the Fleet
ıoration?
ımmander REED. The Fleet Corporation selected the American
rnational Corporation as its agent to build this yard and build
: 120 ships in two years, and they gave them an order such as
dy had ever carried out—a program without precedent—and
selected these people, who were members of Stone & Web-
Corporation, I presume, because they thought they could do
: well as anyone else, or perhaps better, and put it in their
s; and it has been the feeling at all times, I think, that the
rican International Corporation ought to be allowed to decide
what measures it should take and what it was necessary to do,
be given a very large discretion. The minute the Emergency
. Corporation should assume to say that they should do this and
d not do that, then they would relieve them of responsibility
h the shipbuilding corporation had assumed to build these ships
:ertain time.
e CHAIRMAN. Was there, in fact, any controversy between the
ıuthorities on that line?
mmander REED. At an early stage we realized that the work
ɔosting a great deal of money, and there was a great deal of

confusion, and there was congestion of cars which they were not able to unload and handle as we would like to see done. These things were taken up and discussed as they became evident. The plant engineer, Mr. Towle, was particularly energetic in that way, and made many suggestions of things he thought could be done to help.

Senator HARDING. Was there responsiveness on the part of the agent to meet the recommendations of the representatives of the Fleet Corporation?

Commander REED. We thought that at times there was not as much as there might have been.

The CHAIRMAN. Were any steps taken to iron out that conflict?

Commander REED. I felt, personally, that I would not presume to give them direct orders or to recommend that my superior give them direct orders to do certain things when, in their judgment, they did not seem to be conducive to accomplishing the results they were trying to get. I assumed they had been selected to build this yard, as being perhaps the most competent people that could be found, and that they had a very large and elaborate organization in every department, a very systematic organization to handle all the work, and we did little more than confine ourselves to suggestions or recommendations on various things, in regard to the conduct of the work on the island and reporting what we had done and what our views were to our chiefs in Washington.

Senator HARDING. Apart from the natural inconveniences and added cost of severe winter weather, what are your notions of the reason for this inordinate increase in cost?

Commander REED. I think that the magnitude of the task and the short time in which they had undertaken to carry it out, and the natural difficulties of going on a new site, without transportation facilities, and the extremely severe winter we have had—of course, the worst in a great many years—that that accounted for nearly all of the cost and delay, in my opinion.

Senator HARDING. Let us take a specific instance, namely, the pile-driving or the piling; that was largely driven before winter set in, was it not?

Commander REED. Yes, sir. The piling was costing a great deal of money when the weather was favorable; that is true.

Senator HARDING. Why should it so enormously exceed the estimate?

Commander REED. It was very largely due to the difficulties in getting material to the island and getting it where they wanted it, particularly piling, and getting men to and from work. There were very long, tedious, and exasperating delays in getting men there in the morning and getting them home in the evening, and a very large turnover of labor.

Senator VARDAMAN. Senator, might I ask just this moment a question?

Senator HARDING. Certainly.

Senator VARDAMAN. Did I not undestand you to say just a moment ago, Commander, that the Government, or the Emergency Fleet Corporation, had an estimate made of the probable cost of this work?

Commander REED. No, sir; the whole plant was designed by the American Shipbuilding Corporation. The Emergency Fleet Cor-

ion furnished the design of the ships, and said, "We want so
ships like this and so many ships like that," and the Ameri-
nternational Corporation took the contract to build these ships.
nator VARDAMAN. That is not a company representing the Gov-
ent at all, is it? There are no Government officials serving as
s of that company?
mmander REED. American Shipbuilding Corporation?
nator VARDAMAN. Yes.
mmander REED. No, sir; they are all private individuals.
nator VARDAMAN. And do you tell me, or tell the committee, that
merican Fleet Corporation accepted the estimate of this corpora-
that was organized for personal profit, where the amount of
00,000 or $30,000,000 or $[illegible] was to be expended without
investigating it at all?
mmander REED. It investigated, yes, sir; but [illegible] never in a
ion until long after the work started to [illegible] just what the
rican-International Corporation intended to do in regard to the
.
nator VARDAMAN. Was not the Government [illegible] all the ex-
s?
mmander REED. The cost of the plant, yes, sir.
nator VARDAMAN. And it did not take the trouble to investigate
it would be, and in addition to paying the cost of [illegible] these subcontractors a fee of 5 per cent?
nator HARDING (interposing). Not in the plant?
nator VARDAMAN. Yes, sir; in the construction of the plant. He
estified to that.
e CHAIRMAN. No, no.
mmander REED. Let me explain to the committee that the sub-
ractors received a fee on the plant, but not the general contrac-
the American-International Corporation.
nator VARDAMAN. The Government pays that fee, does it?
ommander REED. That fee would be included in the cost of
cost to the American-International Shipbuilding Corporation;
is, they pay a fee in lieu of paying [illegible]
ld say; they gave the subcontractors a fee for the benefit of
its and organization.
enator VARDAMAN. Is not that really a way of getting around the
position that in the construction of the plant there is no fee
l to the corporation owning the plant, but where the
k is done by a subcontractor there is a fee paid?
ommander REED. To the subcontractor?
enator VARDAMAN. To the subcontractor, and that is paid by the
ted States Government?
ommander REED. True.
enator VARDAMAN. So, in a manner, it is the United States Gov-
ment is paying a fee to a corporation [illegible] the construction of the
t, whereas the original contract provided that it should be paid
mmander REED. Well, the fee I spoke of is paid in the purchase of a
t to a manufacturer if you should order a marine engine.
nator JOHNSON. Commander, let us make that perfectly plain.
mmander REED. Yes.

Senator VARDAMAN. Yes; I think that is a pertinent question.

Senator JOHNSON. The subsidiary corporation, the American Shipbuilding Corporation, lets contracts for the units of work that are done upon this work?

Commander REED. For many of them; not all.

Senator JOHNSON. For many of them?

Commander REED. Yes, sir.

Senator JOHNSON. They let those contracts to those individuals whom they selected, generally you said, three in number, as I recall them, and they pay them upon the contract that thus they let 5 per cent as a fee to the subcontractor?

Commander REED. Yes, sir.

Senator JOHNSON. Those contracts thus let have been approved by the American Fleet Corporation?

Commander REED. Yes, sir.

Senator JOHNSON. Now, the largest contract you stated to me that had been let was the contract for the piers to Holbrook, Cabot & Rollins, and that contract was let in that fashion, was it not?

Commander REED. Yes, sir.

Senator JOHNSON. That is, that the American Shibuilding Corporation let the contract for piers for our shipyard to Holbrook, Cabot & Rollins, and then the Government pays to Holbrook, Cabot & Rollins 5 per cent as a fee for doing the work of constructing the piers?

Commander REED. Yes, sir.

Senator JOHNSON. That is 5 per cent upon the cost?

Commander REED. It is a fee fixed at the beginning of the contract and represented by 5 per cent of the estimated cost of the work.

Senator JOHNSON. Yes, sir.

Senator HARDING. Then the multiplied cost of the piling would not increase the fee?

Commander REED. No, sir.

Senator JOHNSON. Just explain that again.

Commander REED. One of the purposes of fixing the fee in the beginning was that the subcontractor in this case can not receive any additional compensation by reason of increased cost. If the fee was fixed at 5 per cent of the actual cost, the more the work cost the more the contractors' fee would be, so that they fixed the fee in the beginning at 5 per cent of the estimated cost.

Senator JOHNSON. Has this piling with its inordinate cost been let by subcontracts?

Commander REED. Yes, sir.

Senator JOHNSON. Upon which a fee is paid?

Commander REED. The same form of contract.

Senator JOHNSON. In these reports that have been made by Mr. Piez and by yourself concerning unit costs, was the fee estimated upon the original unit cost?

Commander REED. Yes, sir.

Senator JOHNSON. Are you quite certain of that?

Commander REED. Yes, sir.

Senator JOHNSON. You could produce, I presume, without difficulty a contract for piling on the piers that would indicate just its terms in that regard, could you not?

Commander REED. Yes, sir

r JOHNSON. And if without inconvenience you could do so, ask that you would please do that at your convenience.
ander REED. Now, you mean?
r JOHNSON. At some time in the future that is convenient

ander REED. Absolutely; yes, sir. The Emergency Fleet ion has all those contracts on file.
r JOHNSON. Were you familiar with Hog Island prior to that this particular contract was let?
ander REED. No, sir.
r JOHNSON. Your first acquaintance with the particular lo- s after the execution of the contract?
ander REED. Yes, sir.
r JOHNSON. What proportion of the work in the shipyard ships was done outside, and what proportion inside the

ander REED. It is estimated—let me put it in this way— shops which will actually be built at Hog Island for the of ways that they are building are about 5 per cent of what built in a normal, ordinary shipyard: that is, there will 5 per cent as many shops for so many ways as an ordinary would think necessary. Therefore, approximately 95 per he fabrication of the steel—that is, getting the steel ready to the ship—will be done outside.
r JOHNSON. Taking that, and the fact that you get your y and the like outside, and the ships are fabricated inside, u give me approximately the proportion of the building of that is done outside and inside: is it 50–50, 40–60, or what?
ander REED. I am not a shipbuilder. My duty here is en- th the plant, and I would rather not try to estimate that.
r JOHNSON. The work has not progressed as rapidly as you has it?
ander REED. It has not.
r JOHNSON. And quite a long way behind the yard is at nt time, from the anticipations?
ander REED. I may say, in answer to that, that the yard is ch behind what was first outlined as the program of the n International Corporation.
r JOHNSON. In your opinion, will it produce any ships this

ander REED. I think it will.
r JOHNSON. When?
ander REED. Again, I am not the shipbuilder. The Emer- leet Corporation has a representative at Hog Island, who rned entirely with the ships, and I am concerned entirely yard, and I do not feel I could properly answer that.
r JOHNSON. Then will you withdraw your statement of or let that stand?
ander REED. I think there will be ships built there this year
r JOHNSON. Turned out, I mean?
ander REED. Finished; yes, sir.
r JOHNSON. Are you familiar with any other yard in that than Hog Island?

Commander REED. I have a fair acquaintance with the navy yard at League Island.

Senator JOHNSON. Are you familiar with the Merchants yard?

Commander REED. I have been there in its early stages. I was also resident engineer at the Bristol plant of the Merchants Shipbuilding Corporation when it started.

Senator JOHNSON. Have you sufficient familiarity as to be able to testify as to details concerning that yard?

Commander REED. In a general way I know what is there.

Senator JOHNSON. Do you know whether or not there will be any trouble in getting ships to sea from that yard?

Commander REED. No; I do not know about that.

Senator JOHNSON. Do you know what the ships draw that are there being constructed?

Commander REED. I think about 20 feet.

Senator JOHNSON. Do you know how much or how deep the canal is through which they are expected to be put to sea?

Commander REED. The Bristol plant is on the Delaware River.

Senator JOHNSON. Do you know or do you not that there are only 12 feet of water through which those ships can be launched?

Commander REED. I know that there is dredging contemplated—you mean, Senator, after they are launched and ready to be taken away?

Senator JOHNSON. It is necessary, is it not, sir, that you dredge the waterway in order to get your ships out?

Commander REED. I am not sure; that may be.

Senator JOHNSON. Are you not fairly sure from your knowledge of that situation?

Commander REED. Yes, sir; think——

Senator JOHNSON (interposing). You have a 20-foot ship with 12-foot waterway, have you not?

Commander REED. I am not familiar with the channel to Bristol.

Senator VARDAMAN. Senator, may I ask, did you bring out the estimated cost of piling that is to be done by the Boston firm?

Senator JOHNSON. Sir.

Senator VARDAMAN. I have forgotten the name of the Boston firm which was let the contract for the piling.

Senator JOHNSON. The Raymond Concrete Pile Co. furnished the piles put in by the Boston firm of Holbrook, Cabot & Rollins.

Senator VARDAMAN. What was the estimated cost of that?

Senator JOHNSON. He has stated $1,000,000 and something; I have forgotten.

Commander REED. $1,600,000.

Senator JOHNSON. You are familiar with the fact that in order to get your ships out from the Merchants Shipyard there will have to be dredging done, are you not?

Commander REED. It appears now that that is so.

Senator JOHNSON. How long will that particular dredging require and over how much space will it have to be made?

Commander REED. I do not know; I do not know the channel in the Delaware River.

Senator JOHNSON. Were you familiar with the details of the acquisition of that property?

Commander REED. Only by hearsay.

Senator JOHNSON. Do you know anything about the value of the land?

Commander REED. The value of the land, as I understand it, is that it comprises the most available stretch of water front near Philadelphia; that is, the value of the property is based on the fact that it has a long stretch of about 2 miles on the Delaware River close to Philadelphia. It has a valuable water front.

Senator NELSON. That is Hog Island?

Commander REED. Hog Island; yes, sir.

Senator NELSON. Has 2 miles of water front, you say, on the Delaware River?

Commander REED. Yes, sir.

Senator NELSON. Would it be of any value or would it have such a high value for anything else except a shipyard?

Commander REED. No, sir; I should say not, unless possibly for a terminal of a big railroad, embarkation terminal of some kind.

Senator NELSON. So that what has given it special value is the fact that the Government is making a shipyard there; is not that it?

Commander REED. I think it had the potential value—that is, it was valuable for a terminal or for a shipyard before the American Fleet Corporation considered building ships there; but the fact that ships were to be built in large numbers there probably added to its value.

Senator NELSON. That is what gives it its special value?

Commander REED. Likely.

Senator NELSON. In other words, the Government had to pay that big price or pay the interest on it because it was making a plant there on that tidewater land that had been partly covered with stuff brought up from the river; is not that it?

Commander REED. All that section of the Delaware River on both sides is being very rapidly developed by shipbuilding and shipbuilders.

Senator NELSON. Tell me one thing, Commander; have you had any commander in chief at Hog Island Yard who had charge of the operations? Have you had any boss there at the head of the whole work, or have you each been running your branch of the work according to your own notions?

Commander REED. In Washington——

Senator NELSON (interposing). Oh, no. I mean up there at the yard?

Commander REED. I was going to explain to you there are three divisions in Washington, each having a representative on Hog Island.

Senator NELSON. What are those three divisions?

Commander REED. The Division of Construction, of which Admiral Bowles has been the head. He has his representative, a naval constructor, there; and Admiral Rousseau, who is the manager of the Division of Shipyard Plants—I am his representative; and the general auditor of the American Fleet Corporation has a local auditor there who verifies their vouchers and bills.

Senator NELSON. But, otherwise than that, there has been no head there to oversee the entire work going on at the yard, has there?

mander REED. Not until last week, Admiral Bowles——
itor NELSON (interposing). Admiral Bowles has gone up there
But you have not had any general head of the yard before?
mander REED. No, sir.
itor VARDAMAN. May I ask just at that point—probably it has
rought out; I am not sure, but that is my misfortune—as I was
esent when it was done: What was on this island before the
nment undertook to build this plant for the construction of
ships?
mander REED. There was nothing there of any value. There
a old ferryhouse in a very dilapidated condition, and it has
ince torn down.
itor VARDAMAN. Do you know where it gets its name?
hter).
mander REED. No, sir.
itor JOHNSON. Commander, in these estimates of cost that were
in the report that you submitted of piling were the estimated
or the total piling, or have you segregated to make it to the
tionate amount now done?
mander REED. Yes, sir: the estimated cost given there is the
ted cost of the number of piles that have been driven.
itor JOHNSON. How great a proportion have been driven?
mander REED. I think at the date of that report about 20 per
ad been driven.
itor JOHNSON. January 17?
mander REED. I think the figures——
itor NELSON (interposing). You will find the figures there,
r Johnson, given by the commander himself in his statement.
itor JOHNSON. That is what I am examining him about. But
s that constitutes about 20 per cent of the piling. How long
take them to finish the other 80 per cent?
mander REED. I should estimate they would finish them some
n August.
itor JOHNSON. This piling is for the support of what, please?
mander REED. The support of the timber ways upon which the
are built.
itor JOHNSON. Then am I to understand that the ways will
completed until August?
mander REED. I should say that the last part of that work
not be finished——
CHAIRMAN (interposing). You do not have to wait until all
ys are completed before you begin laying keels and building
do you?
mander REED. No, sir; they can begin laying keels
iately. I should say, if it was considered desirable to do so.
itor JOHNSON. It is sufficiently completed now to permit of the
of keels?
mander REED. To permit the laying of some keels.
CHAIRMAN. About five of them are in that condition?
mander REED. I would say about five; yes, sir.
itor NELSON. Those are pretty nearly ready now?
mander REED. They are ready enough to start building the
p part of the ship, and the extension at each end could
n.

The CHAIRMAN. The purpose is to begin building ships as soon as they can, is it not, and not to wait until you build the other ways?

Commander REED. I understand they are going to commence very soon; they are going to lay a keel this month, or the early part of next month.

The CHAIRMAN. There is no reason why they can not proceed with the building of the ships as they go on with the work on the other ways, is there?

Commander REED. That is true.

Senator JOHNSON. Some of this piling, for instance, cost 11 times as much as the estimate. Take the Jarrett-Chambers contract, for instance, 11.1 times as much as the estimates. What caused such a disproportion of the cost?

Commander REED. That contractor started in to build a very elaborate pile-driving apparatus, designed principally to take care of the more difficult part of the pile driving, and what he considers will be efficient in the long run, although the initial cost of getting the thing ready is very high, and when this report was prepared he had driven comparatively a small proportion of the piles, and that cost that is given there represented the total cost of that job up to its date, at which time few piles had been driven. If you divide that cost by the few piles which had been driven at that time it is 11 times as much.

Senator JOHNSON. The proportion will decrease?

Commander REED. The proportion will decrease to some extent. I think it will always be higher than the estimate, in my judgment.

Senator JOHNSON. Many times higher?

Commander REED. I should say two or three times that high.

Senator NELSON. What is the length of those piles?

Commander REED. They vary. I suppose the average is 50 feet.

Senator NELSON. Do they have to splice them?

Commander REED. No, sir.

Senator NELSON. Do you get them at 50 feet?

Commander REED. Yes, sir.

Senator NELSON. Where do they come from?

Commander REED. They come from the South.

Senator NELSON. Is it not true that at one time you had such a lot of piles piled up in the yard there that it was hard to get at the work; that your yard was crowded with piles?

Commander REED. At one time, in the effort to relieve the accumulation of cars, they unloaded the piles anywhere they could get them off the cars, that the cars might be taken away, and it accumulated a large number of piles in that way.

Senator NELSON. And they were really so many that they were in your way, were they not?

Commander REED. I would not say that; they were mostly unloaded at outlying places.

Senator NELSON. Have you got enough piling there now to complete the piling, enough material?

Commander REED. No, sir.

Senator NELSON. Are you putting in any concrete piling?

Commander REED. Yes, sir; one group, 10 ways, the Raymond Concrete Pile Co. are putting in concrete piling.

Senator NELSON. Have you done much of that work?

Commander REED. Yes, sir.

Senator NELSON. What proportion of the concrete piling have you one?

Commander REED. The concrete piling contract—they are about s far along as any of them.

Senator NELSON. As the wooden piling?

Commander REED. Yes, sir.

Senator NELSON. In your estimate here of the cost of the piling, hat is wooden piling?

Commander REED. In those figures——

Senator NELSON (interposing). That you gave to Admiral Rousseau?

Commander REED. Yes, sir; they are wooden and concrete piling. here is an item there for concrete piles, too—concrete shipways—the aymond Concrete Pile Co.: most of their work is reinforced concrete work, concrete piles and concrete caps.

Senator VARDAMAN. Will you let him answer the question as to he comparative cost of the concrete and the wooden piles?

Commander REED. The concrete is estimated to cost a little more, and does cost a little more, but not very much more.

Senator VARDAMAN. What do you pay per thousand for the wooden piling?

Commander REED. We pay for the longer piles—50 feet—10 cents per linear foot at point of loading in the South, and the freight brings it up to about 18 or 19 cents at Hog Island.

Senator VARDAMAN. Let me ask you just there. The permanent structure that is made on the island is on piles, is it not?

Commander REED. Yes, sir.

Senator VARDAMAN. You could not have a foundation to build a house there?

Commander REED. All except light buildings have piles under them.

Senator VARDAMAN. After the Government finishes the work that the Emergency Fleet Corporation has let, these improvements go with the land and remain there? There is no way to remove what is there?

Commander REED. The bulk of the shipbuilding [illegible] bulk of the building work would have to remain [illegible] say. It could not be removed to much advantage.

Senator VARDAMAN. So that will enhance the [illegible] very materially for any purpose that it may be used for [illegible] not?

Commander REED. The shipbuilding [illegible] shipbuilding. I do not think they [illegible] purpose.

Senator VARDAMAN. They [illegible] built houses on that ground, of course, [illegible] the land; and if it should be used for any purpose [illegible] its value very much, I should think.

Commander REED. I think the piles [illegible] be of much use except for those [illegible] spaced to support definite [illegible] if you took the buildings away, [illegible] of exactly the same size, they [illegible]

Senator VARDAMAN. They could add a few piles and still use those if they wanted to change the contour or form of the building; the piles would stay there forever, would they not?

Commander REED. Yes.

Senator JOHNSON. Considering your report of January 17, 1918, to Admiral Rousseau—were any reports made by you before that date?

Commander REED. Yes, sir; we have made regular, at least weekly and sometimes more often, reports; usually more often ever since we have been there.

Senator JOHNSON. Have there been any detailed reports made by you before that date? I mean by that, detailed reports setting forth the cost, and that the costs were excessive, that there was delay, that there were piles piled up, and the like?

Commander REED. Yes, sir; we made such reports.

Senator JOHNSON. And those reports are on file with the Shipping Board?

Commander REED. Yes, sir.

Senator JOHNSON. There is one part of your report I would like to call to your attention, if you please: "It is believed that the costs given are below rather than above the actual, as it is probable that items of cost have been omitted rather than extraneous items inserted."

Commander REED. That is, by the method of accounting. The accountant sets up certain headings under which costs are to be distributed—allocated—and there are a great many pending work orders, as they are called, to which work is charged, which when the work is done they are put in the proper pigeonholes in the accounts.

Senator JOHNSON. Who makes up those accounts?

Commander REED. The American Shipbuilding Corporation.

Senator JOHNSON. Do you check them?

Commander REED. Not with any precision; no, sir.

Senator JOHNSON. Have you any system of audit at all?

Commander REED. We have a full system of audit as to the payment of money, but not a very definite system of checking as to particular distribution of these expenditures between the different features of the work.

Senator JOHNSON. The concluding of your report is: "It will be understood that with the methods of accounting employed no great accuracy in the distribution of material costs is to be expected."

Was there any system of accounting that the Government had there at all?

Commander REED. The Government accounting there is to check and verify the contractors' accounting.

Senator JOHNSON. That is, to check and verify the expenditure of money?

Commander REED. The expenditure of money.

Senator JOHNSON. That is all, is it not?

Commander REED. That is about all that we have done.

Senator NELSON. I have here the report that accompanied the Pies report, which follows it in our record, of Mr. Felton. I believe he is connected with the Government.

Senator SMITH of Michigan. He is the president of the Chicago Great Western Railway and connected with the War Department here.

tor NELSON. This is a report he made to Mr. Hurley, the chair- the board, which is dated January 18. He says, among other

xt thing that occurs to me is that entirely too expensive a layout has empted in the way of tracks and yard facilities. While the yards and are not objectionable, the number of tracks is unnecessary, and my is even now to lay only such tracks in those yards as seem to be for the immediate work in hand.

: have you to say about that; is that true?

nander REED. In the beginning and all along, until very , they have not had enough tracks to properly handle cars, has been the great trouble there—not enough tracks to spot rs for unloading, but that condition seems to be largely taken now, and there has been a feeling that they had an excessive of yards to handle cars. The plan is to bring in all the steel unload it into compartments, to divide up the yards into , in which one class, one particular plate, for those 50 ships, say, is to be put in one place, and another one to be put next d so it covers a large area of ground for storage yards for this l that goes into the ships.

:or NELSON. Will you not be in the fix that you spoke about ago, that the yards will be so congested that you could not ind?

nander REED. They are keeping steel back, and the idea is steel back until ready properly to take care of it, and we have any trouble of that kind as yet.

:or NELSON. Now, I will read you further from this report of ton and get your views on it:

:hed the men congregated at [illegible] I stimate that possibly between [illegible] I never in my life saw such [illegible] nder which labor is employed [illegible] gangs and more forces would [illegible] emen should be selected. Half of the men we saw were [illegible] t-size gangs, would have done more [illegible] day of our visit.

: do you have to say about that? Is that [illegible] :?

nander REED. There is a great [illegible]

:or NELSON. Is there not a great [illegible] hich is not busy—is not [illegible] cawber, waiting for [illegible]

or SMITH of Michigan. Waiting for [illegible]

nander REED. They are [illegible] e assigned to work. There is a great [illegible]

or VARDAMAN. The [illegible] ation, the men performing the [illegible] ave nothing to do [illegible]

nander REED. We can report [illegible]

or VARDAMAN. You can report [illegible] ecting material or [illegible] service, and [illegible] material [illegible] work?

nander REED. [illegible] ncy Fleet Corporation and [illegible] leet Corporation [illegible]

The CHAIRMAN. Who is looking after that, Mr. Towle?

Commander REED. Mr. Towle was always on the Island wh was there, and I was there most of the time.

Senator VARDAMAN. How could the condition described in report be permitted?

Commander REED. I think it is due to building up such a l force in a short time with very poor facilities for getting the there; and the men, many of them, walk 3 or 4 miles.

Senator VARDAMAN. But after they get there—they were not w ing when this man saw them in groups, standing around tall where 10 per cent only were working. Did you ever call the a tion of the contractor to that state of affairs?

Commander REED. Yes, sir; that was the subject of frequen mark.

Senator NELSON. Excuse me, Senator. Have you ever repc that condition to the Government?

Commander REED. Yes, sir.

Senator NELSON. To the officials here in Washington?

Commander REED. I never reported as strongly as Mr. Felto had not impressed me that way.

Senator NELSON. But you called attention to this lot of idle n

Commander REED. I had reported a good deal of inefficiency lost motion and excessive costs in doing work there.

The CHAIRMAN. Gentlemen, let me call your attention to the that I expect we will have to have Commander Reed stay over finish to-morrow. Mr Hurley and Mr. Piez are here, and they to take up a matter in executive session with us; and they have other appointment at 5 o'clock, so we had better discontinue this and take it up to-morrow.

Senator NELSON. I just want to ask the Commander one more q tion, and I want him to be prepared to answer it fully in the m ing.

Here is what Mr. Felton further says:

"I have had occasion to be quite interested in the subject of pi in the last month, as you know, and I must say whoever inspe the piling that has been going to Hog Island ought to be calle account, or else the specifications should be revised, because t were many piles there that were not fit to be driven."

Do you have anything to do with inspecting the piles?

Commander REED. No, sir; the piles were all furnished by Emergency Fleet Corporation.

Senator NELSON. Who inspected them before they were driven

Commander REED. They were all inspected before they shipped.

Senator NELSON. Yes; but were they not inspected there in yard before they were driven?

Commander REED. They had some inspection by the inspector the American International Shipbuilding Corporation and by us

Senator NELSON. Will you come prepared to-morrow mornin tell us about that piling, whether it was proper piling or not of it?

(Thereupon, at 4.45 o'clock, the committee proceeded to execu business, and at 5.15 o'clock p. m., adjourned to meet at 10.30 o'c p. m., on Saturday, February 9, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

SATURDAY, FEBRUARY 9, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 10.30 a. m., Hon. Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Vardaman, Nelson, Smith, Jones, Sherman, Calder, and Johnson.

The CHAIRMAN. Commander Reed, the committee is ready to hear you now.

I will first ask you a few questions in connection with the report, published on page 248 of these hearings, regarding the salaries of overhead employees of the American International Corporation receiving $200 per month and over.

Among the names found there are those of Mr. R. L. Hunt, publicity assistant; Mr. D. T. Pierce, publicity manager; and Mr. Thomas B. Reed, publicity assistant.

What were the duties of those gentlemen? What did they do and what was the need for that expense?

STATEMENT OF COMMANDER PAUL L. REED, CIVIL ENGINEER, UNITED STATES NAVY—Continued.

Commander REED. My understanding is that there was a campaign to obtain men, the necessary number of shipyard workers for this plant, and it was thought necessary to advertise extensively in the newspapers that this plant at Hog Island was being built, and the magnitude and the importance of it to the Nation in getting ships, and those men to whom you refer prepared manuscript for the newspapers and wrote up leading articles to be published in the newspapers.

Senator VARDAMAN. What salaries do those men receive?

The CHAIRMAN. It is given here in the report, on page 248 of these hearings, part 1. Mr. Hunt received $666.66.

Senator JONES. That is, a month?

The CHAIRMAN. Yes; a month; Mr. Pierce received $833.33 a month and Mr. Reed $500 per month. Were they out at Hog Island or where were they, Commander Reed?

Commander REED. No, sir; their office was in the main office of the company at Philadelphia.

The CHAIRMAN. Did they do anything else beside [illegible] newspaper articles?

Commander REED. So far as I know, they had no other duties than to advertise the project.

The CHAIRMAN. They did not go and talk to the men at the yard?

Commander REED. Yes, sir: let me qualify that statement—I think they did. I think Mr. Pierce made several addresses to the men and to the public.

The CHAIRMAN. Did they get out a regular publication themselves and have it circulated?

Commander REED. Yes, sir; they have started a small newspaper; I think they have issued about three numbers.

The CHAIRMAN. There have been three issues of it?

Commander REED. Yes, sir; for circulation among the men and, I presume, outside.

The CHAIRMAN. It is called the Hog Island News, is it not?

Commander REED. Yes, sir; the Hog Island News.

The CHAIRMAN. That is printed in Philadelphia, is it?

Commander REED. Yes, sir.

The CHAIRMAN. And circulated out there among the men?

Commander REED. Yes, sir.

The CHAIRMAN. Is it circulated through the mails to any extent, if you know? Do you know what circulation it has?

Commander REED. No, sir; I do not.

The CHAIRMAN. You say there have been three issues up to this time; is it issued weekly, or monthly, or has it any regular time of publication?

Commander REED. I think it is monthly.

Senator VARDAMAN. How many pages has it?

The CHAIRMAN. Here is a copy of it [handing paper to Senator Vardaman].

Senator JOHNSON. Well, did they not receive extra compensation for their patriotic addresses?

Commander REED. No, sir; I believe nothing additional to their salaries.

Senator JONES. Do you know whether they did or not?

Commander REED. I do not; no, sir. I would say this, however, Senator, that they could not have received additional compensation for which the Emergency Fleet Corporation would be responsible, without having the order approved by a representative of the Emergency Fleet Corporation.

Senator JONES. Well, do you know whether such an order has been presented for approval?

Commander REED. Such an order has not been presented for approval to me.

Senator JONES. Well, would it have come to you for approval?

Commander Reed. What are called the overhead expenses of the American International Shipbuilding Corporation were passed on by a representative of Admiral Bowles, Mr. Ferguson, a naval constructor; and I seldom saw anything relating to this publicity work.

Senator JONES. So you do not, as a matter of fact, know whether there has been anything extra in the way of compensation passed on or not?

Commander REED. I do not know.

Senator VARDAMAN. Who fixed those salaries, Commander Reed?

ınder REED. They were fixed or set up in the beginning by ican International Shipbuilding Corporation and presented pproval of the Emergency Fleet Corporation.
r VARDAMAN. What had been the work of these men before e employed there?
ınder REED. It is outlined in considerable detail opposite ıe in that report to which the chairman has referred; it ir previous experience there. A large number of them had ı Stone & Webster.
r JONES. Well, as to these three particular ones, what does n that report?
ınder REED. May I read from the report?
r JONES. Yes.
ınder REED. Mr. Hunt:

s as secretary to George Wharton Pepper; three years as secretary States Fidelity & Guaranty Co.; three years as vice president and f the Morris Plan Co.

Mr. Pierce, it says:

ars as executive assistant to Barber Asphalt Paving Co.

Mr. Reed, the report says:

n years with Philadelphia News Bureau, Philadelphia, North Ameri- ıtograph Corporation, New York, and as advertising and business etc.

r VARDAMAN. What relation have the former employers of n with this work there?
ander REED. I know of none.
r VARDAMAN. Are they interested in the company contract- the Government for this work—the shipbuilding company?
ander REED. I have no reason to think they are; I know of ction.
r JOHNSON. Well, Commander Reed, in order that you may ı error in your answer to the Senator, I will say that Stone er were one of the basic corporations of this corporation.
ander REED. Excuse me, I thought he was referring to these blicity men.
r VARDAMAN. I said, what relation had their former em- with this Government contract and the shipbuilding plant Island?
ander REED. Do you refer to these three men?
r VARDAMAN. Yes; the former employers of those three men.
ander REED. I know of no connection, sir.
HAIRMAN. Did you examine the system of timekeeping and records at the yard?
ander REED. In a general way, yes, sir.
HAIRMAN. Do you know how they were kept, as to [illegible]
ander REED. I know they made a very earnest eff[illegible] ht, but I also know that there were many delay[illegible] de. In hiring so many men in such a short time [illegible] ected, I think.
HAIRMAN. Do you know of cases where [illegible] veral foremen and drew three or four [illegible] n one job?

Commander REED. I do not know of any specific cases. I have heard of statements made as to individual cases where that has happened.

The CHAIRMAN. Did you have occasion to look into that to ascertain whether that was true or not?

Commander REED. No, sir; I did not. It really came under the local auditor of the Emergency Fleet Corporation.

The CHAIRMAN. Who was the local auditor?

Commander REED. A gentleman by the name of Dickerson, representing the general auditor, Mr. Bender.

The CHAIRMAN. And who had charge of that sort of thing for the American International Shipbuilding Corporation?

Commander REED. It came under the department of which Mr. Dow was the head.

The CHAIRMAN. Do you know anything about what they paid for automobile-truck hire out there?

Commander REED. Yes, sir; they paid various rates, according to the size and character of the vehicle.

The CHAIRMAN. Do you know whether they paid owners as much as $10 a day for the use of their cars?

Commander REED. Yes, sir; they did.

The CHAIRMAN. Do you think that was fair pay?

Commander REED. I think they obtained those automobiles at the best terms they could get; we thought they were higher than we had been used to, but conditions were abnormal.

The CHAIRMAN. How about the owners of the trucks? Did they receive as much as $25 or $30 a day?

Commander REED. Yes, sir.

The CHAIRMAN. Were high-priced automobiles hired and placed at the disposal of executives for their use in going to and from the island, and elsewhere, and charged to the Government?

Commander REED. A large number of automobiles and trucks of all kinds were hired every day; it was customary for the officials of the company to go to Hog Island and return in these automobiles, yes, sir.

Senator JOHNSON. What sort of automobiles—just as a matter of curiosity?

Commander REED. Why, the Emergency Fleet Corporation put a limit of $1,200 as the maximum which should be paid for an automobile, and I think, with three exceptions, that was adhered to. Just before that went into effect, they had paid a little more; in one case it went as high as $2,500, according to my recollection. These were all secondhand cars, at these higher prices. And after some correspondence, that was approved; but there was a general rule made that $1,200 was the limit to be paid for a passenger automobile, and that was adhered to almost universally, with exception of three or four cases.

The CHAIRMAN. Did you hear any criticism to the effect that contracts for materials or supplies for certain classes of work were let to subcontractors, through personal favoritism, or through the influence of outside parties?

Commander REED. No, sir; and I feel quite sure that there was very little, if any, of that. We were in a position to know, and I do not believe such a charge could be sustained.

The CHAIRMAN. Do you know whether any of the people connected with the management were sharing in profits on outside contracts?

Commander REED. I had no reason to believe there was anything like that.

The CHAIRMAN. Do you know whether orders were placed with the Schutte & Koerting Co., of Philadelphia, for supplies or material?

Commander REED. I do not know of any. I would not be in a position to say positively. If the material was bought for the ships, I would not know about it, because it did not come in my department.

The CHAIRMAN. Do you happen to know whether the head of that concern has been interned?

Commander REED. I have read so in the newspapers: that is all.

The CHAIRMAN. Have you any further questions, gentlemen?

Senator JOHNSON. I have no further questions, Mr. Chairman.

Senator JONES. No, Mr. Chairman.

Commander REED. May I be allowed to correct a statement that I made yesterday? I was led into making an estimate regarding the situation at Bristol as to the draft of the boats and the depth of the channel, and I stated that I did not know very much about it; but I made some remarks which I find created a wrong impression and which were erroneous. That is, the ships will not draw as much as I had estimated, light draft: and the matter of getting them to sea has been taken care of by the Emergency Fleet Corporation and is all in order, and there will be no trouble to get these ships to sea.

Senator JOHNSON. Well, now, when was it taken care of by the Emergency Fleet Corporation?

Commander REED. I would prefer, if it is possible, to have others speak of that who know about it.

Senator JOHNSON. Well, the only reason that I asked you that, Commander Reed, was because you made that as a correction of your testimony; and while I am very glad to have you make the correction, is it not a fact that the Emergency Fleet Corporation never knew anything about it until the past week?

Commander REED. I know very little about it except that I was assured this morning that all was in order and that — —

Senator JOHNSON (interposing). Were you not at the same time assured that they had only just learned about it?

Commander REED. No, sir; I did not mean that. I was not told anything about that phase of it.

Senator VARDAMAN. Will you permit the Senator an interruption long enough to say the Commander was assured that at the Emergency Fleet Corporation?

Commander REED. We had a conference at which Admiral Rousseau, the manager of the Emergency Fleet Corporation, and Admiral Rousseau said — —

Senator VARDAMAN. He did not state to you that it was arranged?

Commander REED. He made the suggestion that it would be better for some one who had gone through that to be there to testify before this committee as to that, that he had made general statements without being familiar with what had been done.

Senator JOHNSON. Well, I do not want to get you into any difficulties in connection with that situation. You realize the

Commander REED. Yes, sir; I understand.

Senator JOHNSON. But the fact of the matter is that you have be given the assurance to-day, and you were to convey it here to t committee, that this thing was all fixed and that there was goi to be no difficulty. That is about the size of it, is it not?

Commander REED. Yes, sir. I wished to correct an impressi which would be obtained from reading some of the papers that I h thrown doubt, or my testimony had added to the doubt, as to t ability to get these ships from Bristol to the sea. I had not any i formation which would justify me in confirming that sort of i pression.

Senator VARDAMAN. As a matter of fact, Commander Reed, y stated to the committee yesterday that you had no definite inf mation—that is was merely your impression?

Commander REED. Yes, sir.

Senator VARDAMAN. And that was a statement which it was e tirely proper for you to make. And while we have no desire to ca you any inconvenience, neither your chief nor anybody else has right to tell you what you shall testify to before this committee.

Commander REED. He was very careful to tell me that he did n wish to instruct me as to what I was to testify to. My attitude this is entirely an endeavor to correct a wrong impression tha made yesterday through deficient knowledge.

Senator VARDAMAN. And it ought to be known that our attitu and purpose is to try and find out the truth.

Commander REED. Yes, sir.

Senator VARDAMAN (continuing). Which the American peo have a right to know.

Commander REED. Yes, sir.

Senator JONES. Did he tell you how this had been taken care of'

Commander REED. No, sir. The best solution of my own di culty in the matter would be if I could be relieved of saying anythi about it, because I know very little about it, which I think I plained yesterday. I am not trying to cover up anything wh ever; Senator Johnson drew out my general views on whatever might know; I told him I knew a little about it; and I made estimate which I find incorrect.

Senator JOHNSON. Well, in saying you have found your estima incorrect——

Commander REED (interposing). Yes, sir; as to the draft of t ships.

Senator JOHNSON. Well, what is the draft of the ships?

Commander REED. It is not definitely known, but it will be arou 12 feet, at light draft.

Senator JOHNSON. At light draft it will be 12 feet?

Commander REED. When it is ready to go down the river.

Senator JOHNSON. Well, did you not understand from Admi Rousseau that the correction which was referred to meant that th would have to dredge the Delaware River?

Commander REED. I understand that arrangements have b made by the War Department for maintaining whatever dep are necessary.

Senator JOHNSON. Yes; arrangements had to be made for ma taining the depth.

Commander REED. They have been made; whether it was necessary for the Emergency Fleet Corporation to make them I am not sure.

Senator JOHNSON. Yes. Can you ascertain definitely—well, I will not trouble you on that subject; I think you are quite right, and that it is not just to you to trouble you further about that; so that is all.

The CHAIRMAN. Commander Reed, you have been up there, have you? What distance do they have to go to get out from Bristol?

Commander REED. Bristol is on the Delaware River, about 25 miles above Philadelphia, and the boats will be launched directly into the river. The river above Philadelphia has shoal spots; and there are points there where the Army, I find, has already been dredging to maintain about a 12-foot channel at low tide; and there is about 6-foot rise in the tide in the river.

The CHAIRMAN. So they have to go this 25 miles before they get into——

Commander REED (interposing). Deep water.

The CHAIRMAN (continuing). Deep water?

Commander REED. Yes, sir.

The CHAIRMAN. And those shoals are mostly rock, I presume? Do you know anything about that?

Commander REED. No, sir; I do not know as to that.

The CHAIRMAN. Are there any other plants in the vicinity of Bristol?

Commander REED. No, sir; I do not know of any.

The CHAIRMAN. Neither for general shipbuilding nor for naval purposes, or anything of that sort?

Commander REED. I do not know of any other shipbuilding in that vicinity.

The CHAIRMAN. Is there any between Bristol and Philadelphia?

Commander REED. The Cramp shipyard is in the northern part of Philadelphia; it is practically in Philadelphia.

The CHAIRMAN. Well, they have plenty of water there, have they not?

Commander REED. Yes, sir; they build battleships there.

The CHAIRMAN. How much tide have they at Bristol, do you know?

Commander REED. They have about 6 feet at Philadelphia, and I think it is about the same all the way up as far as Bristol. There is no great reduction of the tide.

The CHAIRMAN. That is all, I think, Commander Reed. Have you any other questions, gentlemen? We are much obliged to you, Commander Reed.

Mr. Towle, the committee is ready to hear you now. Please state your name, age, and place of residence.

STATEMENT OF MR. JOHN W. TOWLES, PLANT ENGINEER, EMERGENCY FLEET CORPORATION, AT THE HOG ISLAND PLANT OF THE AMERICAN INTERNATIONAL CORPORATION.

Mr. TOWLE. John W. Towle; I am 45 years old; I live a
Nebr.

The CHAIRMAN. What business or profession have you been engaged in?

Mr. TOWLE. I have been engaged in practicing the profession of civil engineering, particularly as applied to contracting work, for the past 23 years. I have organized and developed two contracting firms, one steel works, a wholesale and retail lumber business, one concrete engineering company, and I am interested in a few other smaller concerns.

The CHAIRMAN. Those are all in Nebraska?

Mr. TOWLE. They all have their headquarters in Omaha.

The CHAIRMAN. Do you have any relations with the Emergency Fleet Corporation?

Mr. TOWLE. I am the plant engineer at Hog Island.

The CHAIRMAN. How long have you been in that position, Mr. Towle?

Mr. TOWLE. I received my appointment about the 20th of September.

The CHAIRMAN. 1917?

Mr. TOWLE. Yes, sir; 1917.

The CHAIRMAN. When did you go there and begin your duties?

Mr. TOWLE. I reported in Philadelphia on the 20th of September.

The CHAIRMAN. Are you still there in that capacity?

Mr. TOWLE. Yes, sir; I am up to the present time.

The CHAIRMAN. What are your duties there, Mr. Towle?

Mr. TOWLE. Principally, observation and reporting conditions.

The CHAIRMAN. Are you engaged out at the Hog Island yard?

Mr. TOWLE. Yes, sir; I have an office in the administration building, and spend, personally, from two to five hours a day out on the works. Then I have a staff of seven men, that are constantly watching different parts of the work and reporting to me daily.

The CHAIRMAN. To whom do you make report?

Mr. TOWLE. I make a report, and pass it to Mr. Reed, and he sends it in through to Admiral Rousseau.

The CHAIRMAN. Will you make a statement to the committee as to your observations regarding the way the work has been going on there, and the difficulties you have had about it, and whether they have been remedied, and if not, why not?

Mr. TOWLE. I have taken the position that the work has not been very well handled: that there is a good deal of inefficiency and lack of proper direction: that, to begin with, the work was not properly laid out.

The CHAIRMAN. Who had to do with that?

Mr. TOWLE. The management of the American International was supposed to lay out the work.

The CHAIRMAN. Do you mean lay out the yard, or the actual work?

Mr. TOWLE. In good contracting, the manager is supposed to differentiate the work into parts, coordinate the parts, in reference to the time when they should be executed; making one part prepare, as it were, a foundation for another part of the work.

The CHAIRMAN. When did you discover that trouble there?

Mr. TOWLE. Well, I discovered it all along.

Senator VARDAMAN. I was not present when this investigation gan. May I ask how long this work had been progressing before ou went there?

Mr. TOWLE. I think we started about the 17th of September, and arrived on the 20th.

The CHAIRMAN. The contract was signed on the 13th, and they ent there on the 15th.

Mr. TOWLE. They were cutting brush the day I arrived on the sland, and there were no improvements at that time.

The CHAIRMAN. What was the condition of the island; how did t lie, as to being wet or dry, or timbered or not timbered; what was ts condition at that time?

Mr. TOWLE. There was about 300 acres of the island that was fairly igh, having been made so by the suction dredging from the river of he gravel. There was about 300 acres of the island that was low and wampy.

The CHAIRMAN. Was that the portion nearest the river or back rom the river?

Mr. TOWLE. The portion nearest the river was the best land; the et land was back to the west end of the island. And then the other 00 acres was just sort of between—medium high. The elevations un, on the good land, from 110 to 117 feet—that is, from 10 to 17 eet above mean low water—and on the medium land the elevations ould run from 105 to 110 feet; and on the lowland the elevations ould run to below zero, or below 100 feet, say, 98 to about 103 feet.

The CHAIRMAN. Was a portion of the land under water at high ide?

Mr. TOWLE. Yes, sir; there would be approximately half of the nd under water at high tide, provided the tide could get onto the nd; but there is a dike that keeps it out.

The CHAIRMAN. That dike extended all the way around the property, did it?

Mr. TOWLE. Yes, sir.

Senator VARDAMAN. How much of that land is overflowed land?

Mr. TOWLE. There would be half of it that would be overflowed if he tidewater was permitted to run over it.

Senator VARDAMAN. How high was the embankment that was hrown up?

Mr. TOWLE. About 15 feet high.

Senator VARDAMAN. About 15 feet high?

Mr. TOWLE. Yes, sir.

The CHAIRMAN. And how wide??

Mr. TOWLE. It had a width at the bottom of about 100 feet and at the top of about 20 feet.

Senator JONES. Do you know when that dyke had been put there?

Mr. TOWLE. No; I have no knowledge as to that.

Senator JONES. Did it look like an old dyke?

Mr. TOWLE. Yes, sir: it was an old dyke; and consisted of clay that had been brought in from some other place.

The CHAIRMAN. It was not simply dumped out of the river?

Mr. TOWLE. No; that clay never came out of the rive

Senator VARDAMAN. The land was how much belo
ou say?

Mr. TOWLE. There was about 300 acres of it that was below high tide.

Senator VARDAMAN. How much below?

Mr. TOWLE. Well, all the way from 8 feet up to 1 foot below high tide.

Senator VARDAMAN. Then, with the dyke removed the water would cover it about 8 feet?

Mr. TOWLE. That is, the lower part of it; yes, sir; not all of it, but the lower portion. Three hundred acres would be entirely under water, and the water depth on that 300 acres would be anywhere from 1 foot to 8 feet.

The CHAIRMAN. It would be a pretty expensive proposition to fill that up, so as to have it above water at high tide, would it not?

Mr. TOWLE. Yes; it would cost a great deal of money to do it.

The CHAIRMAN. Is that crossed by railroads, or dirt roads, or street car lines?

Mr. TOWLE. That land is now being developed for the classification yard, and a storage yard, which have railroads all through them.

The CHAIRMAN. You were going on a few minutes ago to speak in a general way, of the lack of efficiency at Hog Island. Will you proceed with that statement, giving such illustrations and details as you can give?

Mr. TOWLE. That is rather a hard thing to cover; it is very general.

The CHAIRMAN. You said, first, that the work was not properly laid out. Now, what did you mean by that?

Mr. TOWLE. Well, on a job of that kind—you understand, this is my own personal opinion that I am giving you.

The CHAIRMAN. Yes; based on your experience?

Mr. TOWLE. Yes, sir; as a contractor.

The CHAIRMAN. And your information.

Mr. TOWLE. On a job of that kind it is my idea that the first thing to do would be to develop railroad yards, roads, and highways to the property, and streets on the island; in other words, transportation was the essential first thing to develop. The need of the railroad yards was very evident, from the fact that the purchasing department had purchased some 11,000 cars of material for plant construction, and the construction department made no preparation whatever to receive that material.

The CHAIRMAN. What railroad facilities did they have?

Mr. TOWLE. They had a single line, just built by the Pennsylvania Railroad, from Eddystone, that went through the northern edge of the island. There was one switch the full length of this line, that had no crossovers between it and the main line; and that was the entire development of railroads when I arrived on the island.

The CHAIRMAN. Does that switch lead down to where you were building the ways?

Mr. TOWLE. No; that switch was not within three-quarters of a mile of where the ways are.

The CHAIRMAN. And where ought this material to have been delivered?

Mr. TOWLE. Well, of course, the best way would have been to have arranged to deliver the material where it was to be used in permanent construction.

The CHAIRMAN. Yes.

Mr. TOWLE. But there was a stretch of ground just north of the ways, about three-quarters of a mile long and a quarter of a mile wide, that would have made an ideal location for a storage yard for construction material. We called the attention of the management to what we thought was their neglect to develop this feature of the work, and they did not agree with us. They did not develop this yard, and as soon as this material started to come onto the island there was no place to receive it.

The CHAIRMAN. You say you called the attention of the management to this?

Mr. TOWLE. Yes, sir.

The CHAIRMAN. Give the committee the names of the individuals, please. Who represented the management; who was the man you spoke to?

Mr. TOWLE. Mr. Goodenough, the general manager, was one of them, and Mr. Muhlfeld, a member of the executive committee. We went into a number of conferences with them on this proposition—this and others from time to time.

The CHAIRMAN. Were those gentlemen all the while continuously giving their attention to the work?

Mr. TOWLE. They were in the uptown office most of the time; they occasionally came down to the island.

The CHAIRMAN. Were they represented down at the island by foremen, or others?

Mr. TOWLE. About that time Mr. Carr was appointed works manager, but he stayed in the uptown office practically all the time for the first month, I would say. And his assistant, Mr. Andrew, was really the head man on the island, representing the American International at the yard during this first constructive period.

The CHAIRMAN. Do you know how his views corresponded with yours with reference to the work?

Mr. TOWLE. Mr. Andrew was a very hard man to get to commit himself on matters; he was very regular, and passed everything on up to the men above him.

The CHAIRMAN. What was the result of this ordering of this material and having nowhere to put it?

Mr. TOWLE. The cars started to come in toward the island. The first we noticed of it was—I would say, about the 5th of November, when there was somewhere in the neighborhood of 100 cars trying to get in. And then later on in the week there were 400 cars.

About that time we called their attention to it, in a rather strenuous way, and held a conference with Mr. Goodenough. He called Mr. Carr by phone. Mr. Carr assured him that I was unnecessarily alarmed, and that he would take care of the situation.

This was on a Wednesday. By Saturday there were 700 cars trying to get into the island. By Tuesday there were 1,300 cars trying to get into the island, and then the Pennsylvania Railroad put on an embargo, and stopped the movement of all freight toward the island, and there has been an embargo on ever since, except, perhaps, in the last week, when the terribly cold weather and snow has stopped all movement of freight, and they have been able to clean up pretty well the cars that lay in the near-by storage yards.

The CHAIRMAN. Those cars remained loaded and stood there, did they?

Mr. TOWLE. Yes, sir.

Senator JONES. Was there any demurrage on them?

Mr. TOWLE. Yes, sir.

Senator JONES. Who paid that demurrage?

Mr. TOWLE. The Emergency Fleet Corporation.

The CHAIRMAN. Between September and November, could they not have arranged storage yards?

Mr. TOWLE. About six weeks after we first called their attention to the matter of developing the storage yard, they evidently were forced to develop that ground; but it was too late then to stop the congestion, and the situation was never cleared to any extent.

Senator VARDAMAN. Will you explain what you mean by "develop that ground"?

Mr. TOWLE. Develop it with yards and tracks for unloading and storage purposes.

Senator VARDAMAN. May I ask, Mr. Chairman, this question in that connection: Was the ground of such a character that the tracks could be laid on the surface without piling or building a bed for them?

Mr. TOWLE. It was really the only level, suitable piece of ground on the island for developing a railroad yard without any fill. Of course, it would probably be necessary to put a foot of ballast under the track, to hold it firmly in place.

The CHAIRMAN. Well, you say they had begun to develop the yard; do you mean they extended tracks down to this land that you had reference to?

Mr. TOWLE. Yes, sir.

The CHAIRMAN. When did they first do that?

Mr. TOWLE. If you will excuse me, I will refer to my record here [examining papers]. They started to do that along about the 20th of November.

The CHAIRMAN. So that they are now doing what you pointed out should have been done in the first instance, are they?

Mr. TOWLE. Yes, sir; they finally came around to do what we suggested to them.

The CHAIRMAN. And how long did it take them to get the track in there so that it could be used?

Mr. TOWLE. Well, it took them about two weeks, I think, to finish the work.

The CHAIRMAN. Well, why could they not have unloaded those cars then?

Mr. TOWLE. Well, that brings up another question, of the proper handling of the transportation and the unloading on the island, even after they had sufficient tracks. They did not seem to be able to handle either one of those two parts of the work effectively, although, finally, after about the 1st of January, the matter took a much better turn. And as I say, along about the 1st of February they finally caught up with the cars that were in the near-by railroad yards, although, at that same time, there were some 3,000 cars that were still on the way to Hog Island, but had not got close enough to cause any congestion around the yard.

The CHAIRMAN. Had they been stopped in transit on purpose?

Mr. TOWLE. Yes, sir; they had.

The CHAIRMAN. So that you could have had all of that material r the 1st of February if they had been ready for it?

Mr. TOWLE. Yes, sir; they could have had that entire amount of aterial there.

The CHAIRMAN. What kind of material was on those box cars iat you spoke of?

Mr. TOWLE. Everything that you could imagine. Of course, the rst cars that came were largely machinery belonging to the subontractors; there was some lumber; there was a good deal of piling; iere was some cement; there were dinkey engines and dump cars; iere were steam shovels; locomotive cranes; and everything of that ore that was necessary for the work.

The CHAIRMAN. They did unload some of the piling, did they not?

Mr. TOWLE. Yes; they developed a little, short track—that we call ie "dike track," that went up on the edge of the dike, and, as you robably know, the piling is loaded on flat cars, and they are rather asily unloaded; you cut the stakes, and the piles will almost roll of y themselves. They unloaded in that manner about 5,000 piles should judge, a portion of which they threw into the river adoining this dike track, and another portion they put on the land side, he idea being to tow the piling from the dike track to the front f the ways, so that the pile drivers could get hold of them with their ables and lift them into place and drive them.

The CHAIRMAN. Well, that was all right, was it not?

Mr. TOWLE. Yes, sir; it was at that time.

The CHAIRMAN. How far did they have to tow it?

Mr. TOWLE. About a mile; an average of about a mile.

The CHAIRMAN. Was the work delayed because this material was iot unloaded?

Mr. TOWLE. Yes, sir.

The CHAIRMAN. Did you have idle men around there on the pay roll, not able to do anything?

Mr. TOWLE. Yes, sir.

The CHAIRMAN. To what extent?

Mr. TOWLE. During the months of November and December I would say that the extra expense due to the fact that they did not have the proper material at the proper place, must have cost the job from 30 to 40 per cent of the labor cost.

The CHAIRMAN. Do you know about how many men they put on at first to clean off that brush and begin work there?

Mr. TOWLE. I should think about a thousand men to begin with.

The CHAIRMAN. And that number was increased right along from day to day, was it?

Mr. TOWLE. Yes, sir; it was constantly being increased.

The CHAIRMAN. And those subcontractors were also delayed because they could not get their machinery and material, were they?

Mr. TOWLE. Yes, sir; they were delayed just as much as anybody else. The subcontractors, I might say here, have approximately 75 per cent of the construction work on the island—that is, the plant construction work on the island.

Senator JOHNSON. That is, you mean the subcontractors who are aid compensation, by commissions or otherwise, have about 75 per ent of the work?

Mr. TOWLE. That would be my estimate. I have never fig up exactly.

The CHAIRMAN. Commander Reed, did you make any inq regard to those subcontracts? I believe that Senator Johnson you yesterday to do that. I do not know whether you expect committee to take that matter up with the Emergency Flee poration or not.

Commander REED. I think he asked me for the form of th tract. I have that here, Mr. Chairman.

Senator JOHNSON. Would it not be well, Mr. Chairman, t that inserted in the record?

The CHAIRMAN. Yes; the form of subcontract used by the can International Shipbuilding Corporation with its subcont will be inserted in the record at this point.

(The subcontract referred to is here printed in full, as follov

CONTRACT NO. 83-C6.

OCTOBER 19,

AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION,
Agent for United States Shipping Board Emergency Fleet Corporati

We hereby propose to construct for you at the new shipbuilding p Hog Island, so-called, near Philadelphia, approximately 15,000 linear dike to elevation 112-115; laying, ballasting (ballast not to exceed 1 depth under ties) and surfacing 45 miles of track, including unloadi handling of ballast, rails, ties, fastenings, and other track material. Th to include all switch and special work necessary for finished and operatin complete.

"We will at all times, in the prosecution of the work hereunder, use efforts to protect and subserve your interests, and we further agree to take this work promptly, to prosecute it diligently and to entirely comple the earliest possible date."

1. *Service to be rendered.*—With respect to this work, we propose to your agents, being guided in all respect by such instructions as you ma time to time give us.

We will furnish at our own expense:

(*a*) The service of our executive officers, who will direct and over work.

(*b*) Our business organization and the services of our Chicago acco auditing, purchasing, and other forces, in so far as required.

(*c*) All other expenses of our Chicago office except only the salaries in the engineering and drafting departments for the time they are enga the work.

(*d*) The services of all the above-mentioned personnel in organizi supervising the work.

(*e*) Equipment as follows: Three steam shovels, 8 hoisting engi derricks (without lines or blocks), 4 clamshell or orange-peel buckets, trifugal pumps, 3 engines and boilers to operate pumps.

2. *Compensation.*—We are to receive as compensation for the service a of our equipment above mentioned the sum of $54,000, payable in instal of $10,000 each on the last day of each month commencing with Novem 1917, until $40,000 of the total is paid, and the balance of $14,000 on com of the work "to your satisfaction."

If material change in the scope of the work is ordered by you, there s added to, or subtracted from this amount a sum equal to 5 per cent of t mated cost of such work as is added to or deducted from that now contem

3. *Cost of the work.*—It is understood that "cost of the work, as dete by the local auditor of the Emergency Fleet Corporation, subject to ap the general manager of the Emergency Fleet Corporation," shall inclu following, whether commitments or expenditures are made by you direct us for your account:

(*a*) The cost of all materials, machinery, and labor entering into the v

(*b*) The cost of small tools and construction equipment except that furnished by us as above specified.

(c) The cost, at salary rates, of men in the engineering and drafting departments in our Chicago office or in the field, in connection with any engineering, designing, and inspection work which we may be called on to do in connection with this work for the time actually engaged on the work.

(d) The cost of a works office, including the salaries of a superintendent of construction, an accountant, and such assistants as they may require; the cost of all field engineering and inspection required; and the expenses of maintaining a works office.

(e) The cost of insurance and any expense incurred in connection with any accident or damage to person or property.

(f) Any traveling expenses or expenses of similar character and "other like expenditures" which we may make except for items specified in section 1. All, however, subject to the approval of the "principal representatives of the United States Shipping Board Emergency Fleet Corporation," as furnished at our own expense.

(g) Freight charges and loading and unloading expenses paid by us for and in connection with the transportation of construction machinery and equipment furnished by us to and from the place of the works, provided that the charges for transportation of such construction machinery and equipment over distances in excess of 1,200 miles shall require your special approval.

4. *Disbursements.*—You are to reimburse us promptly on account of all payments made to meet our pay rolls for men employed at the work and are to pay us monthly upon bills to be rendered by us and supported by proper vouchers for any salaries or wages paid or other expenses incurred on account of the work hereunder by us from our Chicago office, subject to approval for each payment by the local auditor of the Emergency Fleet Corporation.

5. *Purchases and contracts.*—You are to furnish us on our requisitions with all equipment, hand tools, materials, and supplies required for the work, except items to be furnished by us as specified in section 1.

6. *Insurance.*—Unless otherwise directed by you, we will place such insurance in the names of the United States Shipping Board Emergency Fleet Corporation and yourselves for your respective accounts as well as ours, covering liability to the public and to employees engaged on the work, with limits of $10,000 for any one person and $20,000 for any one accident, unless workmen's compensation laws make it advisable to secure insurance in some other form or amount. The policies will be in the usual form.

7. *Audit.*—Our correspondence, records, vouchers, and books of account, in so far as they apply to the work done under this agreement, "will as far as possible be separately kept" and will always be open to your inspection.

8. *Termination of employment.*—If at any time you should become dissatisfied with the manner in which the work is being conducted, or should you wish for any reason to discontinue the work, you are at liberty, after 10 days' notice in writing to us, to terminate our employment and take possession of the work done and the materials on hand for use therein.

In case you take such action we shall be entitled to receive for our services 5 per cent of the cost of the work to the time of termination, plus a reasonable rental for our plant to such time of termination, instead of the installments provided for in section 2 and including any installments already paid.

9. *Labor.*—We will comply with all instructions not contrary to law, as to wages or conditions of employment of labor on this contract, given to us by you in writing.

10. *Acceptance and approval.*—On acceptance of this proposition by you, it will constitute an agreement between us.

BATES & ROGERS CONSTRUCTION CO.,
By W. A. ROGERS, *President.*

Accepted October 22, 1917.

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
By AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, *Agent.*
By WALTER GOODENOUGH,
General Manager.

Approved October 22, 1917.

P. L. REED,
Resident Engineer, United States Shipping Board, Emergency Fleet Corporation.

NOVEMBER 8, 1

We agree to the following insertions in the contract dated October 19 and accepted October 22, 1917, between Bates & Rogers Construction C United States Shipping Board Emergency Fleet Corporation:

On the first page, as a second paragraph, add:

"We will at all times in the prosecution of the work hereunrer use ou efforts to protect and subserve your interests, and we further agree to take this work promptly, to prosecute it diligently, and to entirely comp at the earliest possible date."

First paragraph, under article 3, "cost of the work," insert, after th "work," "as determined by the local auditor of the Emergency Fleet C tion, subject to appeal to the general manager of the Emergency Fle poration."

Subparagraph (*g*) under article 3, fourth line, "us to and from the p works," should be changed to read, "us to and from the place of the wo

Article 7. Audit: Add, after the word "agreement," "will as far as p be separately kept and."

BATES & ROGERS CONSTRUCTION CO.,
W. A. ROGERS, *President.*
UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORA
By AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, *Agen*
WALTER GOODENOUGH, *General Manager.*

NOVEMBER 20,

We agree to the following changes in the contract dated October 19 and accepted October 22, 1917, between Bates & Rogers Construction C United States Shipping Board Emergency Fleet Corporation:

Article 2. Compensation; page 2 and first paragraph, after the wor completion of the work," add the following: "to your satisfaction."

In subdivision (*f*), article 3, second line, erase the word "any," and the word "other," insert "like," so that the sentence will read, "an like expenditures."

After the words "section 1," insert the following: "All, however, sub the approval of the duly authorized representatives of the United State ping Board Emergency Fleet Corporation."

BATES & ROGERS CONSTRUCTION CO.,
W. A. ROGERS, *President.*
UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORA
By AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, *Agen*
WALTER GOODENOUGH, *General Manager.*

Senator JOHNSON. While we are on this subject, Mr. Chai will you permit me to ask this question: In some fashion the ment has come to me, which may be wholly erroneous, and it that reason that I would like to have you answer the questio Towle, in order to correct what may be a wrong impressio statement has come to me that there were various carloa anchors——

Mr. TOWLE. Of what?

Senator JOHNSON. Carloads of anchors hauled to one of the building plants. Do you know anything about that?

Mr. TOWLE. I do not know what you mean by "anchors."

Senator JOHNSON. Ship anchors.

Mr. TOWLE. I think that is a mistake.

Senator JOHNSON. That is a mistake, is it?

Mr. TOWLE. Yes, sir.

Senator JONES. I heard that those anchors were sent some near New York City.

Senator JOHNSON. I do not know; I probably was wholly in about the suggestion. Have you heard the same thing, S Jones?

Senator JONES. Yes, I heard it, but I heard that it was in regard a yard near New York City.

Mr. TOWLE. There is no ship material on Hog Island at all.

Senator JOHNSON. Well, I am curious to get your view as to what e Government paid for at Hog Island. The statements that were iginally made to this committee were as to the tremendous and arvelous and efficient organizations that were handed over to the overnment and constituted the "know how" that the Government as paying six or seven million dollars for. And those tremendous d marvelous and efficient organizations apparently sublet the work at was to be done there—75 per cent of it—you say, for which e Government paid.

Well, just what was it, according to your understanding, that the overnment was paying this six or seven million dollars for, of the know how" of these efficient organizations that were to be handed er to the Government? Can you tell the committee about that?

Mr. TOWLE. Do you mean by that that you want me to analyze, om a business standpoint, the contract between the——

Senator JOHNSON (interposing). No; I want to get your idea, if I an, as to what the Government paid six or seven million dollars for p there, in the "know how" that was described to this committee in such glowing terms at the beginning of its investigation?

Mr. TOWLE. Well, from all that I have seen on the job, the Government is paying (whatever the profit may be) for the [illegible] of three men who are not on the pay roll of the Emergency Fleet Corporation, and the use of, perhaps, $2,000,000 for a period of two years, of which the Government pays 6 per cent interest on $1,700,000.

Senator JOHNSON. In the last par[illegible] made, the use of $2,000,000 represe[illegible] for the land, does it?

Mr. TOWLE. $1,700,000 was the [illegible]

Senator JOHNSON. And on that [illegible] as rental?

Mr. TOWLE. Yes, sir.

Senator JOHNSON. Together [illegible] every other [illegible]

Mr. TOWLE. Yes, sir.

Senator JOHNSON. We[illegible] moving one [illegible]

Mr. TOWLE. A[illegible]

Senator JOHNSON. That [illegible] very m[illegible]

Mr. TOWLE. I [illegible]

Senator JOHNSON. [illegible] greatly a[illegible]

Mr. TOWLE. We[illegible] ation and [illegible]

Senator JOHNSON. [illegible] would it, in your [illegible]

Mr. TOWLE. Yes, sir.

Senator JOHNSON. [illegible] Government [illegible] $40,000,000 [illegible]

Mr. TOWLE. Yes, sir; I think you are right.

Senator JOHNSON. All right. Now, I think we can rather dismiss that part of the consideration as not being of extraordinary value to the Government.

Let us take the other consideration. You say "for the services of three men." Who are the three men?

Mr. TOWLE. Mr. Robinson, Mr. Muhlfeld, and Mr. England.

Senator JOHNSON. Yes.

Mr. TOWLE. Now, there may be other men there that I have never come in contact with that are not on the pay roll of the Emergency Fleet Corporation; I am not sure.

Senator JOHNSON. Well, you would reach the conclusion, would you not, that they were rather expensive men, if we had to pay $6,000,000 for their services?

Mr. TOWLE. Well, if you look at it in that way, I think so.

Senator JOHNSON. All right, sir.

The CHAIRMAN. What do those gentlemen do—those three men you speak of?

Mr. TOWLE. Mr. Robinson is president of the American International Shipbuilding Corporation; Mr. Muhlfeld is on the executive committee and has now taken active charge of the work on the island; and Mr. England is the general auditor, I think, of Stone & Webster, and he spends considerable time there with the auditing department.

The CHAIRMAN. Did those other gentlemen give their entire attention to the work from the beginning?

Mr. TOWLE. Mr. Muhlfeld was there practically all the time; Mr. Robinson was there part of the time. He may have been giving his attention to the work, but I do not know positively about that.

The CHAIRMAN. You spoke about "perhaps $2,000,000." What made up the other $300,000 above the cost of the land?

Mr. TOWLE. I estimated that it would take the other $300,000 to finance the balance of the company's part of the contract.

The CHAIRMAN. Do you mean they would have to make some advances for labor and material, or something of that sort?

Mr. TOWLE. They pay for nothing whatever.

The CHAIRMAN. In what way would it take $300,000 to finance their part of it?

Mr. TOWLE. Well, they have to pay the salaries of these other men.

Senator VARDAMAN. What other men?

Mr. TOWLE. That is, these three men. They probably maintained more or less of an organization somewhere else that I know nothing about; that was merely a rough estimate.

The CHAIRMAN. Do you know if they have an organization—and more particularly the Stone & Webster people—which had been employed in building cantonments in Texas or somewhere else?

Mr. TOWLE. Yes; they had the work at San Antonio, Tex.

The CHAIRMAN. Did they bring that force up to Hog Island?

Mr. TOWLE. Practically the entire force was brought to Hog Island. And Mr. Carr, the works manager at San Antonio, was made the works manager at Hog Island.

The CHAIRMAN. Well, was that of value?

Mr. TOWLE. Why, I would think so; yes, sir.

The CHAIRMAN. Did they utilize the organization of the New York Shipbuilding Co. to any extent?

Mr. TOWLE. They took over, I think, one or two men from that organization and put them on the pay roll of the American International, and in that way got the services of those men. And I think, in addition to that, they received consultation from a good many of the practical men in the New York Shipbuilding Co. Among them, as I know, would be Mr. Andrew, the general manager. And Mr. Sapp, I think, was another of those men.

The CHAIRMAN. What did that consultation have to do with—consultation in what way? What was it about?

Mr. TOWLE. In reference particularly to the design of the ways and the design of the ships themselves.

The CHAIRMAN. With the organizations that you speak of and the assistance you mentioned, could they have arranged to avoid this 30 or 40 per cent extra expense on labor and this delay and this congestion of material; and if so, how could that have been arranged?

Mr. TOWLE. If they had developed the part of the work that should have been developed first, in my judgment, and had held back some of the other things that they were trying to do until they were ready to proceed logically on that work, it would have avoided much of the congestion and much of the loss of time and labor.

The CHAIRMAN. What did they do with this force which they brought up and this organization that you mentioned and how were they employed?

Mr. TOWLE. They absorbed them into their larger organization, giving them the different branches of the work and different commands.

The CHAIRMAN. Actually, how were they employed? What kind of work did they do?

Mr. TOWLE. I think most of the men that came from San Antonio were employed in the building department, because the San Antonio work was a cantonment-construction work, and that was largely wooden buildings. So, naturally, these men that were trained to that work were put onto the wooden buildings.

Senator JONES. Did they bring a lot of these men up after the work were ready for them?

Mr. TOWLE. No; I hardly think they did.

Senator JONES. You think when they got on the [illegible] to use them efficiently?

Mr. TOWLE. They were not quite through with San Antonio when the Hog Island work started.

Senator VARDAMAN. May I ask [illegible] Mr. Carr and Mr. Andrew?

Mr. TOWLE. The Emergency Fleet Corporation.

Senator VARDAMAN. The General Government of the United States pays them?

Mr. TOWLE. Yes, sir.

Senator VARDAMAN. Mr. Carr was the general manager of the contractors that built the San Antonio cantonment?

Mr. TOWLE. Works manager is the title he had.

Senator VARDAMAN. Do you know what he was paid?

Mr. TOWLE. I know about what he was paid. It sh[illegible] list there.

Senator VARDAMAN. About how much?

Mr. TOWLE. I think about $10,000 a year.

Senator JONES. A letter in the record here from Mr. Robinson, president, says that Mr. Howard L. Rogers gives about 20 per cen his time without pay. Do you know Mr. Rogers?

Mr. TOWLE. I have never met him; no, sir.

Senator JONES. You have not seen him around there?

Mr. TOWLE. I have not.

Senator JONES. He also says a gentleman by the name of Con gives about 10 per cent of his time. Have you met Mr. Connick?

Mr. TOWLE. Mr. Connick has been there; I have seen him on job, I think, three times.

Senator JONES. And how long did he stay there?

Mr. TOWLE. Just for a half day or something of the kind; he have been there other times when I did not see him. The record shows that Mr. Carr receives $833.33 a month.

Senator JOHNSON. Will you state what the record shows ther to the justification for the increase of his salary?

Mr. TOWLE. Shall I read the history?

Senator JOHNSON. Yes, please.

Mr. TOWLE [reading]:

Seven years with Stone & Webster, general superintendent of large jobs, as Minneapolis power station, one of the fastest-built stations in the cou power house at Keokuk; new buildings for the M. I. T.—

That is the Massachusetts Institute of Technology—

and recently finished first national Army cantonment at probably the l cost of any out of 16.

Senator JOHNSON. There is another quotation in relation to (that he gave up a permanent home, is there not, and justifyin increase in his salary on that account?

Mr. TOWLE. There is nothing here to that effect.

Senator JONES. I think that is the first list about it.

Senator JOHNSON. Oh, pardon me; it is in the subsequent His home was doubtless in San Antonio, was it not?

Mr. TOWLE. Judging from the work he has done, he must l lived in various places.

Senator JOHNSON. I assume that he must have, because I am r ing from page 1447, volume 5. The notation is "Annual incre gave up permanent home to come here." And I suppose, ha come from San Antonio, where his permanent home was, that the justification for the increase in his salary.

Senator JONES. According to this other notation, however, he worked around at very many different places.

Senator JOHNSON. And his permanent home is at each place?

Senator JONES. A graded increase.

Mr. TOWLE. My impression is that Mr. Carr's home originally in Philadelphia, and afterwards in Boston.

The CHAIRMAN. With regard to transportation, what is the si tion there to-day?

Mr. TOWLE. They have plenty of yards now developed to t care of any material that should come to the yard. Their organ tion for handling the same, however, is not as yet what it should b

The CHAIRMAN. In what respect?

Mr. TOWLE. It is not properly managed.

The CHAIRMAN. Who has charge of that?

Mr. TOWLE. A man by the name of Oviatt has charge of that.

The CHAIRMAN. Why do you say it is not properly managed?

Mr. TOWLE. Because they do not deliver the cars as promptly as I think they should to the proper location for unloading, and they are using too many engines, too large an organization for the number of cars they are handling.

Senator VARDAMAN. Is that work done by a subcontractor?

Mr. TOWLE. No; Mr. Oviatt is one of the American International head men, and that transportation is all directly under the American International.

Senator VARDAMAN. The expenses, however, are paid by the Government?

Mr. TOWLE. Yes, sir. The Bates & Rogers Co. of Chicago are doing the construction work as a subcontractor, but even then all of their salaries are paid by the Government just the same as though they were working for the American International.

The CHAIRMAN. You say the construction work with the railroad——

Mr. TOWLE. Is being done by the firm of Bates & Rogers.

The CHAIRMAN. That is all being done at the expense of the Government?

Mr. TOWLE. Yes, sir.

Senator VARDAMAN. And the Government is paying those people a fee or commission on the amount expended, is it not?

Mr. TOWLE. Yes, sir.

Senator VARDAMAN. So they lose nothing themselves, regardless of the cost?

Mr. TOWLE. No.

Senator VARDAMAN. And the more money they spend the larger it will be?

Mr. TOWLE. They are not affected in any way by the cost of the work; the fee is fixed [illegible]

Senator VARDAMAN. What is the fee?

Mr. TOWLE. Bates & Rogers have [illegible] different parts of the work [illegible] and the building [illegible]

The CHAIRMAN. What is that [illegible]

Mr. TOWLE. Well, I should judge [illegible]

Senator JONES. May I ask you what [illegible] this land from being [illegible]

Mr. TOWLE. It [illegible] ing in front of the [illegible] impractical [illegible] decided [illegible] and [illegible] the [illegible] these [illegible] now being [illegible] Bates & Rogers.

Senator JONES. Where were [illegible]

Mr. TOWLE. One of these [illegible] the property of the American International [illegible]

on the property of a lumberman by the name of Henson, just off the eastern edge of the island.

Senator JONES. Why could not that material have been used to raise the lowland up to a better level?

Mr. TOWLE. The reason for not using this material for elevation of this land is from the fact that it takes about two years for this material to settle and become available for surface work.

Senator JONES. They had to put in a lot of piles?

Mr. TOWLE. Yes.

Senator JONES. And could they not fill in about those piles?

Mr. TOWLE. The piling mostly were driven in the shipways, and there was no room for any additional fill of that kind.

Senator JONES. This other land that is low, does not that have to be filled up in some way before it can be used?

Mr. TOWLE. Yes, sir; it has to be filled up; but it had to be filled with better material than this dredging.

Senator JONES. What kind of material was it filled with?

Mr. TOWLE. They are obtaining some red gravel about 2 miles from the present site of the yards, which they are hauling in from the outside, for filling this low place in the classification and the storage yard, so that they can build their tracks on it.

Senator JONES. Are they going to put buildings on some of that too?

Mr. TOWLE. No; they are filling merely for the trackage.

Senator VARDAMAN. That is very expensive, is it not?

Senator JONES. Excuse me, just a minute, Senator. They are filling in just for trackage. Are they leaving the rest low and unfilled?

Mr. TOWLE. They had the ground pretty well covered in their original plan with some sort of building work, trackage, or other thing, and they were contemplating leveling off and building practically the entire ground, except where these impounding basins were.

Senator JONES. They have not that filled in yet?

Mr. TOWLE. Not entirely so.

Senator JONES. And are not likely to have for some time?

Mr. TOWLE. They have cut out about 15 miles of this track, and for the present that will not be filled.

Senator JONES. Do you not think they could have used this material in filling up to a pretty good advantage?

Mr. TOWLE. Not if they were going to use the land for any purpose at the present time; it would be nothing but soft mud, you see.

Senator JONES. It would soon dry out. We fill our tidelands out in our State that way.

Mr. TOWLE. They figure it takes about two years for that kind of material to settle properly and to give it a workable surface for any kind of construction work.

Senator JONES. They will put some buildings over this at various places?

Mr. TOWLE. Not over the impounding basin.

Senator JONES. I am not talking about impounding basins—all this 300 acres of low land—will they not put some buildings on that?

Mr. TOWLE. That they are filling from the outside.

Senator JONES. I understood 300 acres of this land was below water when they started in.

r. TOWLE. Below high water.
nator JONES. From a foot to 8 feet of water over it. That will to be raised, will it not, when they put buildings or structures :?
r. TOWLE. I do not believe you have got quite the right idea of . This land is low and below high tide and would be covered ı water if it was not for the dike, but by a system of drainage pumping, loading the muck into sumps and then pumping it : the dike into the river, the level of the water is kept down so : it does not interfere to any great extent with the use of that l, providing they will raise it to a grade of about 107.
enator JONES. They will have to raise it generally, then?
Ir. TOWLE. They will have to fill in over that low ground approxi-ely from 3 to 7 feet.
enator JONES. And on that at different places they will erect the ldings?
Ir. TOWLE. There will be a few buildings, but mostly railroad ds.
enator JONES. You, as an engineer, do not see any more eco-ıical use of this dredged-out material?
Ir. TOWLE. That dredged-out material could not be used for the ng of this ground and then expect to use it at once for railroad ds or buildings.
'he CHAIRMAN. Where did this material come from that you are ng in filling now?
Ir. TOWLE. It comes from some ground that belongs to the city Philadelphia.
The CHAIRMAN. Do you have to pay anything for it?
Mr. TOWLE. I think there is a small payment per yard made, but m not sure about that.
The CHAIRMAN. And it costs how much to get it down there and load it?
Mr. TOWLE. I have never been able to get any figures on that yet, t I judge it would cost 40 or 50 cents a yard.
The CHAIRMAN. How many yards are you going to need of it?
Mr. TOWLE. Probably 300,000.
The CHAIRMAN. Does not the railroad company do any of that rk of extending its lines and building of tracks?
Mr. TOWLE. The railroad company is not interested in any of these es on the property of the American International, with the excep-n of two lines I described, that cross the north edge of the property, ich belongs to the Pennsylvania, and they have the right of way er this property, which they obtained before the title passed, as I derstand it, to the American International.
The CHAIRMAN. They do not use that right of way?
Mr. TOWLE. Yes; that land is the source of all supplies of cars.
The CHAIRMAN. Yes; but that does not come within several miles where you need the material, as I understand.
Mr. TOWLE. No; that line goes right along the edge of the ground t is being filled.
'he CHAIRMAN. And that line is built by the railroad and ed by the railroad company?
'r. TOWLE. The line is owned and built by the railr

The CHAIRMAN. And that was there when you began work?

Mr. TOWLE. Yes; it was just being finished when we began work.

The CHAIRMAN. And then they have one switch, as I understanc it, or branch?

Mr. TOWLE. They have a switch there running parallel and the ful length of the property, and now they are constructing a cut-off lin to Sixtieth Street, called the "Sixtieth Street cut-off," which is abou one-fourth completed, and it is upon the rails of this line, the trac of this line, over which they are hauling in this fill for the yards. I happens to cross over the property of the city, and there is som very good material which they have obtained for this filling purpos

The CHAIRMAN. It did not cost the Government anything for tha line?

Mr. TOWLE. No.

The CHAIRMAN. But what lines, then, is the Emergency Fleet Cor poration building there?

Mr. TOWLE. They are building all the lines and yards on the island There was originally some 75 miles; it has been cut down now to 6 miles.

Senator VARDAMAN. Is that filling work being done by a subcon tractor?

Mr. TOWLE. Yes, sir. The filling work, you mean?

Senator VARDAMAN. The filling; yes.

Mr. TOWLE. The filling in of the ground?

Senator VARDAMAN. Yes.

Mr. TOWLE. Yes; it is being done by Bates & Rogers.

Senator VARDAMAN. For which they receive a fee?

Mr. TOWLE. Yes; they receive a fee; I can not remember just wha the fee is.

Senator VARDAMAN. That is additional to that which you have already read?

Mr. TOWLE. That is additional to this one.

Senator VARDAMAN. You do not know what the contract price was for that work upon which the fee was fixed, or do they receive a certain per cent on the cost of the work?

Mr. TOWLE. They wanted about 7½ per cent, I think, profit on the estimated cost of that work.

Senator VARDAMAN. Was that agreed to?

Mr. TOWLE. No; Commander Reed cut that down.

Senator VARDAMAN. How much did he fix it at?

Mr. TOWLE. I think he was willing to give them about 5 per cent, and I think that that contract is not entirely closed as yet, although they are doing the work. It has not been fixed absolutely yet; they have not reached a complete agreement and understanding.

Senator VARDAMAN. All expenses are paid by the Government of the United States and they get a commission on the amount expended?

Mr. TOWLE. They get a commission based on the estimated amount that they contemplate expending.

Senator VARDAMAN. What is the amount that they contemplate spending?

Mr. TOWLE. You mean on the——

Senator VARDAMAN (interposing). On the fill; yes, sir.

:owle. On the fill?
or Vardaman. Yes, sir.
owle. Oh, I presume about $250,000.
or Vardaman. They get 5 per cent on that, or is that the fee
y receive?
owle. They get about 5 per cent of that.
Chairman. In reference to the other problem of transporta-
e getting of men to the yards, etc.: What is being done about

owle. The passenger transportation?
Chairman. Yes.
owle. Of the workmen to and from the yard?
Chairman. Yes.
Towle. That has been improving slowly in the last month.
eet railway company have a line that comes down to East-
at connects with a line built from the island which they call
ttle Line, which is a double-track passenger line that runs
the island out and back—a kind of a stub, you might call it.
street railway company has put in as many cars as they can,
s, of course, very inadequate to carry the men, and they bring
own to the shuttle line and then we bring them into the job
at.
tor Nelson. On your line?
Towle. On our line.
tor Nelson. What is the length of your line?
Towle. That line is about three-quarters of a mile in length.
kes care of in the neighborhood of 2,000 or 3,000 men a day.
here is a passenger service that goes out over the same shuttle
om the yard and connects with the Philadelphia & Reading
hree-quarters of a mile from the island, and then goes in on
rack to two or three different stations, where they leave them
l in the morning pick them up. They run about seven or eight
n that line daily each way, and in the morning: that is, seven
t out, and seven or eight back at night. That brings in about
nen. Then they have some boats that run on the river be-
Billingsport and the job, and between Philadelphia and the job.
tor Nelson. Who is that for?
Towle. The American International or the Emergency Fleet
ation. These men are supposed to pay a small fee for their
rtation, I think it is 10 cents, but the expense of running these
nd these boats falls upon the American International, so that
ular transportation brings in as high at 10,000 or 12,000 men

Chairman. Have you any estimate of what that costs the
ency Fleet Corporation?
Towle. No, sir: I have no idea.
tor Nelson. Ultimately that cost of the boats and on the sub
nes out of the Government, does it not?
Towle. Oh, yes: the Government pays all the expense of every
p there.
tor Nelson. So that this shipbuilding corporation, the Inter
l Shipbuilding Corporation, or the parent corporation, does
es not pay any of it?

Mr. TOWLE. They are our agents.

Senator NELSON. How?

Mr. TOWLE. They are the agents of the Emergency Fleet Corporation; the contract makes them the agent of the Emergency Fleet Corporation.

The CHAIRMAN. Can we not get an idea about that cost to the Emergency Fleet Corporation of transporting the men back and forth?

Mr. TOWLE. It is possible that their accountants could furnish you that.

The CHAIRMAN. What accountants?

Mr. TOWLE. That is of the American International.

Senator NELSON. You know what the fare charged on the boat is, do you not?

Mr. TOWLE. Ten cents.

Senator NELSON. Each way?

Mr. TOWLE. Yes, sir.

Senator NELSON. And what is it on the street car?

Mr. TOWLE. Well, the street car company charges 5 cents.

The CHAIRMAN. What part of that expense does the Emergency Fleet Corporation pay? Do they get 5 cents?

Mr. TOWLE. They take the 10 cents, I understand, and pay all the expenses of operating the trains and the boats.. Of course, as far as the street car company is concerned, there is no connection there at all. The street car company takes its 5 cents.

Senator NELSON. How about the shuttle line?

Mr. TOWLE. The shuttle line is run entirely at the expense of the American International.

Senator NELSON. Do they charge them for riding on that?

Mr. TOWLE. No; there is no expense on that at all.

Senator NELSON. And what does it cost the workmen to get in on the railroad? You speak about 8,000 or 10,000 men coming in on the railroad.

Mr. TOWLE. I understand it is 10 cents.

The CHAIRMAN. Each way?

Mr. TOWLE. Each way.

Senator NELSON. That comes out of the men, of course?

Mr. TOWLE. The men pay that.

Senator NELSON. As well as on on the steamboat and the cars?

Mr. TOWLE. Yes, sir.

Senator NELSON. It really comes out of the men?

Mr. TOWLE. The men pay the 10 cents—that much of it.

The CHAIRMAN. Ten cents does not cover the cost of operating the boats or operating the cars?

Mr. TOWLE. I should think not; no.

The CHAIRMAN. Do they run the boat right along?

Mr. TOWLE. The boats were tied up for about six weeks during that cold weather.

The CHAIRMAN. What points does the boat run to and from?

Mr. TOWLE. The principal boats run from the wharves up in Philadelphia down to the wharf at Hog Island, and then there is one boat that runs across the river.

Senator NELSON. How many of the employees live in or near Hog Island?

[r. TOWLE. There are about 4,000 men there now.
enator NELSON. That you house there?
[r. TOWLE. That we house there: yes, sir.
enator NELSON. What is the total number of employees?
[r. TOWLE. The employees?
enator NELSON. Yes.
[r. TOWLE. It gets up to about 24,000; it has gotten up to that
n.
enator NELSON. Can you work all of them?
[r. TOWLE. They are all being employed there: yes, sir.
enator NELSON. They are employed, but do they work there?
[r. TOWLE. Yes, sir: they are working there.
enator NELSON. All the time?
[r. TOWLE. No: I would not say all the time.
enator NELSON. Do you want to say that there is an average of
00 men working there?
Mr. TOWLE. No: there is not an average of that many being em-
yed. I would say——
Senator NELSON (interposing). How many? What is the average
nstantly employed there?
Mr. TOWLE. Approximately 21,000 or 22,000.
Senator NELSON. How long have they had that many men em-
loyed?
Mr. TOWLE. About 30 days, I should say.
Senator NELSON. You read Mr. Piez's report, did you not?
Mr. TOWLE. Yes, sir.
Senator NELSON. You will notice what he says in that report. Have
ou read the report of the president of the Great Western Railroad,
[r. Felton?
Mr. TOWLE. Yes, sir.
Senator NELSON. You saw what he says about the large number of
en there that are kept there and the lot of them which were idle?
Mr. TOWLE. Yes, sir.
Senator NELSON. Is that true or not true?
Mr. TOWLE. It is partially true.
Senator NELSON. Partly true?
Mr. TOWLE. I do not exactly agree with him; I think he has made
a little strong.
Senator NELSON. He says about 10 out of every 100 are working
some gangs. What have been your duties there?
Mr. TOWLE. I have been representing the Emergency Fleet Cor-
oration as plant engineer on the island.
Senator NELSON. Just as engineer?
Mr. TOWLE. More as a——
Senator NELSON (interposing). Have you anything to do with the
mployment of labor or putting them to work?
Mr. TOWLE. Nothing whatever.
Senator NELSON. Nothing to do with setting the men to work, or
ything of that kind?
Mr. TOWLE. No, sir.
Senator NELSON. Are these workmen working under subcontractors
are they working directly under the corporation or the Govern-
nt?
enator NELSON. What proportion are under subcontr

Mr. TOWLE. Under both.

Mr. TOWLE. I should think that there are about half of them who would be on the salary pay rolls of the subcontractors and about half of them on the direct pay rolls of the American International.

Senator NELSON. Those that are on the pay rolls of the subcontractors, the subcontractors get a commission of 5 per cent on them, approximately, of their wages?

Mr.. TOWLE. Not definitely 5 per cent. They get a fixed fee that is based on the total cost of the work, which is approximately 5 per cent.

Senator NELSON. On the total cost of the work that the subcontractor performs?

The CHAIRMAN. On the estimated cost?

Mr. TOWLE. On the estimated cost of the work, not the actual cost

Senator NELSON. Not the actual cost, but on the estimate that wa made?

Mr. TOWLE. Yes, sir.

Senator NELSON. Were there estimates made of each job that wa let out to each subcontractor before it was let?

Mr. TOWLE. Yes, sir.

Senator NELSON. And that is the guide, the criterion for the 5 p cent commission?

Mr. TOWLE. That is the basis of the compensation—of the fee.

Senator NELSON. Without any regard to whether the work c more or less?

Mr. TOWLE. Yes, sir; without any regard to that.

Senator NELSON. These poor subcontractors will lose, then, bec it indicates in a good many instances the work has cost twice estimate.

Mr. TOWLE. That is, you mean they would lose a prospectiv they might have gotten had they known it was going to cost so n

Senator NELSON. Yes.

Mr. TOWLE. Yes, sir.

The CHAIRMAN. How many ways have they got ready fo now, Mr. Towle?

Mr. TOWLE. There are no ways that are entirely completed river end of the ways have not in any case been fully cons but I judge that they could lay possibly four keels, that is, t far enough along so that it will take the full length

[illegible] which runs down into the river t

[illegible] and, of cou

The CHAIRMAN. The dredging [illegible] approximately 10 feet in front of each side of the ways?

Mr. TOWLE. I [illegible] there is that [illegible] the [illegible] here is very deep. [illegible] average of [illegible] feet.

The CHAIRMAN. [illegible]

Mr. TOWLE. Yes, sir; I [illegible]

The CHAIRMAN. And they have provided with the work on [illegible] sides these 22?

Mr. TOWLE. They have [illegible] work on 18 ways.

The CHAIRMAN. They have [illegible] work there?

Mr. TOWLE. They have provided with the work on 11 of them together—the [illegible] have been temporarily suspended.

The CHAIRMAN. Do you know when they will begin work on the other?

Mr. TOWLE. Just at the present time—I [illegible] Mr. [illegible] the only [illegible] of my department [illegible] rather did another [illegible] that.

The [illegible] the piles [illegible] the sides?

Mr. [illegible]

The [illegible]

Mr. [illegible] months [illegible]

Senator [illegible] the [illegible] of the piles?

Mr. [illegible]

Senator [illegible] Mr. Felton reports [illegible]

Mr. [illegible] per cent of the piles [illegible] as the sticks [illegible]

Senator [illegible] What is the other 25 per cent?

Mr. [illegible] 25 per cent [illegible] possibly 10 per cent [illegible] full length, but by cutting them [illegible] will comply with [illegible]

Senator [illegible] What are the dimensions of the piles?

Mr. [illegible] specifications calls for?

Senator [illegible] I mean what is their circumference and diameter?

Mr. [illegible] is the limit and 18 inches [illegible]

Senator [illegible] and not [illegible]?

Mr. [illegible] from about 40 to 75 feet.

Senator [illegible] they have to splice them?

Mr. [illegible] the first splice them.

Senator [illegible] Many of them have been spliced?

Mr. [illegible] necessary to splice them; they [illegible]

Senator NELSON. These defective ones you speak of, they would have to be cut up and spliced, would they not?

Mr. TOWLE. There are a few of those pilings entirely too small to be used at all, and they have not been used.

Senator NELSON. Then Mr. Felton is mistaken, according to your notion?

Mr. TOWLE. He has made it a little too general. I have seen some cars there where the pilings were not over 3 or 4 inches at the small end, and they would have to cut back 25 feet to get a good stick out of them, but they are very long; they run from 60 to 75 feet.

Senator NELSON. What kind of timber was it?

Mr. TOWLE. They were all long-leaf yellow pine.

Senator NELSON. Sound timber?

Mr. TOWLE. A very good class of timber.

Senator VARDAMAN. What do you do with the defective piles?

Mr. TOWLE. They are taken back to the little sawmills we have there and cut up for crib timbers for one of the impounding basins that is being built.

Senator VARDAMAN. You say "crib timber"?

Mr. TOWLE. To make wooden crib work, so as to hold dirt.

Senator VARDAMAN. I know what a crib is, but not what it is used for.

Mr. TOWLE. It is used to make an impounding basin for the purpose of holding the suction dredging: they are going to elevate some land there.

Senator VARDAMAN. All of those piles are paid for at the same price by the Government whether they are defective or not?

Mr. TOWLE. Those piles were purchased by the purchasing department of the Emergency Fleet Corporation here in Washington, and they were supposed to have been inspected by them, and I understand that those piles that were too small had been figured back, as we call it, to the point where they were or proper size, and we did not pay for the waste end that was afterwards cut off.

Senator VARDAMAN. Can you cut off a pile that is 50 or 70 feet long 25 feet of it and still use it?

Mr. TOWLE. If the remaining part is long enough to fill the requirements of the work.

Senator VARDAMAN. If they were ordered for work that required a 75-foot pile, I do not see how that could be.

Mr. TOWLE. You could not use them for that; but if you take a 75-foot pile and cut it off 25 feet you could use it where a 50-foot pile was required.

Senator VARDAMAN. And you have use for piles of that length?

Mr. TOWLE. Yes; we have use for piles down as low as 25 feet in the buildings.

Senator NELSON. You have use for a good deal of this piling for the ways, have you not?

Mr. TOWLE. Yes: out of about 130,000 piles, 83,000 of them go into the ways.

Senator NELSON. What proportion of the piles contemplated by the plan have been driven?

Mr. TOWLE. In the ways?

Senator NELSON. Yes; or in the yard up there altogether?

Mr. TOWLE. There have been approximately 40,000 piles driven p to date.

Senator NELSON. And how many of the total amount?

Mr. TOWLE. One hundred and thirty thousand, so that would be bout 30 per cent.

Senator NELSON. Not quite one-third, then?

Mr. TOWLE. About one-third.

Senator NELSON. And so that there are two-thirds on the ground?

Mr. TOWLE. No, sir: there are not. There is about one-half of the alance that are en route on the cars.

Senator NELSON. And the other half, then?

Mr. TOWLE. The other third or one-half of the balance has not een shipped.

Senator NELSON. So you have not really got any piles at the yard o speak of, except what have been driven?

Mr. TOWLE. They are very short of piles at the yard at the present ime: but I want you to understand that that is not the fault of the urchasing department of the Emergency Fleet Corporation for the eason that they started all these piles [illegible] and hen the congestion came and the embargo stopped the movement of verything, and they are just piling up now.

Senator NELSON. You mean the congestion where?

Mr. TOWLE. The congestion on the island is [illegible] the early part of my statement [illegible] the island, so that the railroad companies [illegible] would not receive any more shipments for [illegible].

Senator NELSON. Was there not a time when you had [illegible] of piles piled up in the yard there that you could [illegible]?

Mr. TOWLE. We had at one time about [illegible] but they have since been used up.

The CHAIRMAN. [illegible]

Mr. TOWLE. Back of the railways.

The CHAIRMAN. [illegible] place there?

Mr. TOWLE. On the first [illegible] which we call First Street [illegible] this street—the shops and [illegible] kind: [illegible] can get [illegible] compressors [illegible] Second Street [illegible] the shops is the storage yard [illegible] they have developed [illegible] then comes the railroad [illegible] into the yard [illegible] tically the way [illegible] out.

The CHAIRMAN. [illegible] now?

Mr. TOWLE. The [illegible] and the wood building [illegible] shortage of lumber now [illegible].

The CHAIRMAN. [illegible]

Mr. TOWLE. Yes, sir; that is entirely due to the embargo.

The CHAIRMAN. Are there any housing facilities for the workm on the island?

Mr. TOWLE. There are permanent quarters finished and occupi by about 2,500 men; and there are temporary quarters complet that are being occupied by about 1,900 men, which makes about 4,4 altogether.

The CHAIRMAN. And where are they located?

Mr. TOWLE. They are scattered all over the island; most of th are along the northern edge of the island, though, where they a building the permanent barracks for the men.

The CHAIRMAN. Bunk houses—is that on high ground?

Mr. TOWLE. No, sir; that is not high ground.

The CHAIRMAN. It is not under water at any time?

Mr. TOWLE. No; it will never be under water. There will water standing around, probably, after rains until they can take ca of it by a drainage system and pump it out into the river.

The CHAIRMAN. Is there any growth there of trees?

Mr. TOWLE. There was a growth of low trees and brush, but th has all been removed.

Senator NELSON. Were you there when the work was first starte

Mr. TOWLE. I was there. Yes; I was there the first week, not t first day.

The CHAIRMAN. Is there any opportunity for making housi facilities in addition to those already made there?

Mr. TOWLE. They have plans that will take care of approximat 7,000 men on the island proper, and I understand that there a other plans being made to house a great many more about 2 mi from the island; that is another department, however.

The CHAIRMAN. There is plenty of land there to build houses is there not?

Mr. TOWLE. It is not a suitable place for a man to bring his fa ily to live. It is bad enough for a man to be there alone and live these bunk houses; but you could not construct little houses or fl or anything of that kind and get people to live there that cared a thing about where they lived.

The CHAIRMAN. On account of the land?

Mr. TOWLE. On account of the nature of the country roundabo there would be no chance of any development there; there would no place for stores or moving pictures or things of that kind that h people to a locality. It is no place to live; it is low, swampy, a wet, and always will be, in that portion of the island.

Senator CALDER. You say bunk houses have been erected to hou about 7,000 men?

Mr. TOWLE. Bunk houses have been erected to accommodate abo 5,000, and some more are being constructed, so that there will be place there for about 7,000 permanently.

Senator CALDER. Do you expect to be housing the single men wor ing there?

Mr. TOWLE. Yes; these are all for the single men.

Senator CALDER. Do you think houses of this character will b able to hold workingmen receiving higher wages?

Mr. TOWLE. They will not be of much use in taking care of th better classes of mechanics, I would say.

Senator VARDAMAN. How many men will be employed there after the plant is completed?

Mr. TOWLE. That is a matter I have no personal knowledge on at all.

Senator VARDAMAN. You have, I think, stated as high as 25,000.

Mr. TOWLE. Twenty-four thousand is about as high as we have been at any one time.

Senator JONES. The turnover of men who occupy those bunk houses is likely to be very high, is it not?

Mr. TOWLE. I think it is very high.

Senator JONES. And likely to continue so?

Mr. TOWLE. Yes; I would say so.

Senator JOHNSON. With respect to the conditions that you found existing there, Mr. Towle, in November and December of last year, did you in writing communicate these conditions to your superiors?

Mr. TOWLE. Yes, sir; they are all through my [illegible]

Senator JOHNSON. Did you complain of the [illegible] of the material, and the like?

Mr. TOWLE. Yes, sir; both to the representatives of the American International; and, as I say, they were [illegible]

Senator JOHNSON. Can you [illegible] made concerning conditions when they got [illegible]

Mr. TOWLE. I think I can.

Senator JOHNSON. [illegible] made by you or suggestions made by you?

Mr. TOWLE. I think so.

Senator JOHNSON. Would you [illegible] please—take the period [illegible] there is any report [illegible] like to present.

Mr. TOWLE. Here [illegible]

Senator JONES. What [illegible]

Mr. TOWLE. [illegible] erence, [illegible]

Senator JOHNSON. [illegible] the conges[illegible] in the report [illegible]

The [illegible] search [illegible]

That [illegible]

Mr. TOWLE. [illegible]

Senator JONES. [illegible]

Mr. TOWLE. Yes, [illegible]

Senator [illegible]

Along [illegible] ties of [illegible] to its [illegible] ter [illegible] Mulfeld [illegible] and To[illegible] spare [illegible] yard and [illegible] rally of proper [illegible]

if this space could be utilized for a storage yard, that it might be unnece to develop that entire ground north of the wet basins for storage and class tion yards, inasmuch as that was the lowest ground and full of sloughs. Goodenough at that time took the positive position that he was reserving space for other developments, so the matter was dropped. In the mean no attempt was made to develop any trackage whatsoever on the island, the result that when the cars began to arrive there were no tracks to h them upon and no place to unload the material. About two weeks ag management awoke to the fact that this space could best be utilized in st yards so they finally allotted the same to storage yard No. 2, but it has been within the last two days that they have started to develop the same. age yard No. 1 has not as yet been developed, and at the rate they are pro ing with their grading and filling, it will be 30 days before it is possible very much with it.

This railroad situation has been taken up with them at various times d the past two weeks, but it was not until the last few days that they v admit that the situation was at all serious. We regret exceedingly that i been necessary for the Pennsylvania Railroad to place an embargo against Island. At the present time cars are being unloaded from any track that can be set upon. Some of these cars have already been unloaded off o Pennsylvania Line about 1 mile east of the entrance to Hog Island, necessit rehandling over a long distance. Piling have been unloaded at various p and especially on the land side of the Levee Short Line, all of which will ha be rehandled. It certainly is to be regretted that storage yards were no veloped, as they would have provided ample room for the storage of all struction material other than piling, and at a place easily accessible to all of the work.

This sort of thing was reported very frequently by you; is not correct?

Mr. TOWLE. Yes.

Senator JOHNSON. Were you at any time directed by the Ship Board to do anything to remedy the situation?

Mr. TOWLE. That was not the policy of the Shipping Board, ator Johnson, as I understood it.

Senator JOHNSON. The fact would be, then, that you were directed to remedy the situation?

Mr. TOWLE. Yes, sir.

Senator JOHNSON. What do you mean by saying that "that not the policy" as you understood it? What was the policy?

Mr. TOWLE. You are getting me into rather a deep subjec might say briefly, however, that the American International po were selected as agents for the Emergency Fleet Corporation, and they took the responsibility of doing this work, and it was no our province to direct them what they should do. We could gest and observe and report, but not direct. The direction through men higher up.

Senator SHERMAN. In that connection, let me add, will you, Se Johnson, what was said by George J. Baldwin, who is the presi of the American International Corporation, in an address ma the Philadelphia Chamber of Commerce on the 7th day of Febr 1918? He uses this language:

Who are the people to whom this great work has been confided? Is it v their power to accomplish it?

American International Corporation has been formed for the purpose o moting international trade in American bottoms constructed by American builders and carrying the freight of American merchants—

I will omit a portion of that description.

It had become interested in other ocean transportation lines and had chased one of the oldest and best equipped shipbuilding yards in the co

base force of naval architects, engineers, and efficient shipbuilders was second none, the New York Shipbuilding Corporation, of Camden, which, in addition carrying on its own great undertakings, has supplied nearly 100 men for vernment service. We were therefore fully equipped to apply the very best nerican shipbuilding intelligence and experience to the new task.

Closely allied with American International Corporation was the engineering m of Stone & Webster, of Boston (builders of the great Keokuk Dam and any other important works), which came to the job fresh from a most onomical and quick construction of one of the great military cantonments. lthough it had already supplied more than 800 men for national service, it ill had an equal number of competent engineers and construction men ready r the engineering and construction end of the work.

A full kowledge of these facts caused Gen. Goethals to select our corporation r this work and induced Mr. Hurley and Admiral Capps to confirm his judgent. There seemed to be no better combination of effective, organized power ady at hand and no time to build up new organizations. Those which had een perfected during long years of effort must necessarily be the ones to use if uick results were desired.

In this same address the compensation is described, which is very pecifically set out, that the total estimated cost of the first fifty ,500-ton boats at $1,100,000 each is $55,000,000. The fee for contructing each boat is $55,000, with certain penalties which may reduce it to $41,000, one-half payable when each boat is one-half completed, and the remainder when it is accepted by the Government. The second lot of seventy 8,000-ton boats at an estimated cost of $1,650,000 each totals $115,500,000. The fee per boat is $82,500, perhaps reduced by penalties to $65,000. He adds here:

This represents the largest development, the greatest effort, and the quickest expenditure of that amount of money ever experienced by Philadelphia.

Senator VARDAMAN. What are you reading from?

Senator JOHNSON. This is an after-dinner speech.

Senator SHERMAN. An address by George J. Baldwin, vice president of the American International Corporation, and chairman of the board of the American International Shipbuilding Corporation, a subsidiary company, an address at the Chamber of Commerce, Philadelphia, February 7, 1918, this week, marked "Release February 7, 1918." I assume, since no order has come in canceling it, it was delivered.

Senator JOHNSON. It was; it is reported in the newspapers.

Senator JONES. Mr. Towle, after you sent in these reports, did any of the higher officials of the Emergency Fleet Corporation come down and look over the situation?

Mr. TOWLE. Yes, sir.

Senator JONES. And confer with you and these other people?

Mr. TOWLE. Yes, sir.

Senator JONES. And what was the result?

Mr. TOWLE. The American International rather took the defensive position that they were doing everything they could and they were still carrying out their contracts as agents of the Government, and hat they expected to continue to direct the work; and that under he terms of the contract they did not think that we ought to interere and direct them, as that was their province and what they contracted to do.

Senator JONES. And they went on doing as they pleased, practically?

Mr. TOWLE. Yes, I should think so.

Senator JONES. Who came down from the Emergency Fleet?

Mr. TOWLE. Admiral Rosseau was there and Mr. Piez came down as soon as he was appointed general manager.

Senator NELSON. But, by the terms of the contract, did not the Emergency Fleet Corporation have a right to come in and see that they carried on the work properly, to take possession of it?

Mr. TOWLE. I think they have a final right; yes, sir.

Senator NELSON. Yes, they have a right. So that the ultimate power was with the Emergency Fleet Corporation?

Mr. TOWLE. Yes, sir; undoubtedly.

Senator NELSON. They would have a right to call these officials of the international to time and make them do their duty, and if they did not act, take possession of the yard; is not that correct?

Mr. TOWLE. I think so; yes, sir.

Senator NELSON. So that it is not exactly as you expressed it a moment ago, that the whole thing was left to this international corporation; that they had the ultimate say, that the ultimate say was with the Emergency Fleet Corporation.

Mr. TOWLE. I think you must have misunderstood me. I do not remember making that statement just in that way, Senator.

Senator NELSON. Perhaps I did.

Senator JOHNSON. You stated, though, Mr. Towle, that the policy of the Shipping Board, as you understood, was that the American International was the agent in this construction, and that they should not be interfered with; is that correct?

Senaor VARDAMAN (inerposing). That was the contention of the American International.

Mr. TOWLE. At the time I speak of we did not deem it advisable to go so far as to take the direction of the work away from the American International.

Senator NELSON. They have now, have they not?

Mr. TOWLE. Yes; I think that now the policy has been changed and that Admiral Bowles has been sent to Philadelphia for that purpose.

Senator NELSON. Do you not think this committee ought to be credited with that? [Laughter.]

(No response.)

Senator NELSON. Now, tell us, do you not think this committee, instead of the Emergency Fleet Corporation, ought to get credit for that?

Mr. TOWLE. You can not get me in on that, Senator. [Laughter.]

Senator JOHNSON. Mr. Towle, what else can you say about the situation up there? What has been your general viewpoint of the whole thing? You have been there; you have been familiar with it. With your experience you have been able to gauge exactly the character of work and the like. Generally speaking, now, tell us your viewpoint.

Mr. TOWLE. My position there has been rather that of an unwelcomed critic.

Senator JOHNSON. Justified by the circumstances?

Mr. TOWLE. I thought so.

Senator JOHNSON. But go on from that point now—"unwelcomed critic," why?

r. TOWLE. Because I did not think that the work was going on as ould.

enator JOHNSON. And those in charge of the work you did not k were efficient or competent?

r. TOWLE. Well, there are lots of good men there—I won't say . I did not feel as though the men who had the real authority of cting the work were proceeding with it along the lines that they ild; that there could be some improvements and changes that ld help it.

enator NELSON. They had big salaries; they ought to have been l men, had they not?

Ir. TOWLE. Does that call for an answer?

enator NELSON. Yes.

Ir. TOWLE. They were presumed to have been good; yes, sir.

enator JOHNSON. Are there any other matters that you can relate is concerning the situation there?

Ir. TOWLE. Well, it is a big subject.

Senator JOHNSON. Well, let us recapitulate. First, of location. is a bad location?

Mr. TOWLE. I would not say that, altogether.

Senator JOHNSON. Not altogether?

Mr. TOWLE. You have got to get to the river to build ships.

Senator JOHNSON. Would it be correct to say it is a half bad cation?

Mr. TOWLE. There are some bad parts about the location.

Senator JOHNSON. It is a difficult territory to develop for the purse, in any event, is it not?

Mr. TOWLE. It is a difficult place to develop freight and passenger ansportation; yes, sir.

Senator JOHNSON. And to carry on an enterprise as enormous as is enterprise is, it is an extremely difficult territory, is it not?

Mr. TOWLE. Yes, sir; I would say it is.

Senator NELSON. Senator, will you allow me to ask a question right ere?

Senator JOHNSON. Yes.

Senator NELSON. What do you think this Hog Island would have en available for if it had not been taken for a shipyard?

Mr. TOWLE. I have not any idea—probably some industrial devel- ment would have come along and picked up the site and used it.

Senator SMITH of Michigan. We might have interned German isoners there.

Senator JOHNSON. You would not want to drown them, would you?

Senator SHERMAN. If the chairman will permit me, I have the me authority I quoted a while ago—Mr. Baldwin—giving an inion on Hog Island, relating to his company:

We had secured an option upon the best and apparently only adequate site on Atlantic coast for a shipyard of this magnitude adjacent to one of the large lustrial cities * * *.

Senator VARDAMAN. Do you quote it to approve it?

Senator SHERMAN. Oh, no. I am quoting it for the information the witness and Senator Johnson.

Senator JOHNSON. Mr. Towle, we pass from the site. That we e discarded.

Senator NELSON. Will you allow me, Senator, to say it can not be there are no more Hog Islands on the Atlantic coast than that one.

Senator SHERMAN. It is a good thing for the taxpayers to know.

Senator VARDAMAN. This is the most hoggish one I know of.

Senator JOHNSON. Passing from the site, the development of which was intended by this contract, we find there was a lack of vision in those who were the agents of the Government in bringing together the material required for development. That is not too strong a statement, is it?

Mr. TOWLE. In the right order.

Senator JOHNSON. In the right order. Then, that there was gross inefficiency and incompetency in actually bringing the material upon the ground and distributing it.

Mr. TOWLE. Yes, sir; that is right, but that word "gross" is rather strong, Senator.

Senator JOHNSON. Yes; I meant it strong. I want you to correct me—I am recapitulating—because you were in charge for the Government of the United States.

Mr. TOWLE. Then, I would suggest cutting out the word "gross."

Senator JOHNSON. All right, then. There was incompetency; then there was inefficiency in providing the proper storing places for material in order that, with some degree of expedition, the work might go forward.

Mr. TOWLE. Yes, sir.

Senator JOHNSON. That is correct, is it not?

Mr. TOWLE. Yes, sir.

Senator JOHNSON. Then we can say there was gross incompetency and gross inefficiency in piling up 1,300 cars at a time when every car meant something to us at that particular territory, with the inability to unload them and put them on their way again?

Mr. TOWLE. Yes; I think that is right.

Senator JOHNSON. And then, so far as the construction work proceeded up to the 1st day of January, it was not managed or directed in the fashion that it ought to have been by skillful and efficient men.

Mr. TOWLE. That is my opinion.

The CHAIRMAN. Let me refer to Mr. Baldwin's address, which Senator Sherman has introduced, and see what you have to say regarding this statement:

> Everyone who has followed the work in the International shipyard is fully conversant with the tremendous physical difficulties encountered in converting an unimproved tract of shore property into a shipyard with the utmost speed—

I presume that is all right—

> The nearest approach by trolley or railroad was a mile and a half distant.

That is correct, is it not?

Mr. TOWLE. It is not quite that far.

The CHAIRMAN (reading):

> There were no connecting freight nor passenger lines, no water, and no source of power supply.

Mr. TOWLE. There were freight lines which had been built in there. There was no water supply. There was water transportation, however.

The CHAIRMAN. No "connecting freight or passenger lines, no ter, and no source of power supply."
Mr. TOWLE. Except by railroad.
The CHAIRMAN. What is wrong about that? You say there were ight and passenger lines?
Mr. TOWLE. There were freight lines that had been built in there.
The CHAIRMAN. A freight line up to what point?
Mr. TOWLE. It had been built to the northern edge of the island.
The CHAIRMAN. What railroad?
Mr. TOWLE. The Pennsylvania, the line I described, the double-ck line.
The CHAIRMAN. How far did that terminate from the actual rk?
Mr. TOWLE. It is right in among part of the work.
Senator CALDER. That was constructed after the enterprise was rted?
Mr. TOWLE. No, sir; that was constructed before the enterprise s started.
Senator CALDER. But that did not exist before the enterprise was dertaken?
Mr. TOWLE. Yes.
Senator CALDER. This established line?
Mr. TOWLE. The Pennsylvania started that line and bought the ght of way before the American International acquired title.
The CHAIRMAN. What were they going to do with it, and where ere they going to?
Mr. TOWLE. They were really on the way to Fort Mifflin, I under-and.
The CHAIRMAN. Where is that located?
Mr. TOWLE. About 2 miles above, on the river.
The CHAIRMAN. Above Hog Island, on the river?
Mr. TOWLE. Yes, sir.
The CHAIRMAN. Is there any development there?
Mr. TOWLE. Yes; there has been for a great many years.
The CHAIRMAN. The Pennsylvania Railroad was going out through the Hog Island track to Fort Mifflin?
Mr. TOWLE. Yes; and then they were going on across the Schuylkill at Girard Point to connect it with their main yards there on Girard Point.
The CHAIRMAN. And that had already been built when this tract was acquired?
Mr. TOWLE. They were just finishing the main-line work when I got there.
The CHAIRMAN. Then he says:

By the middle of January facilities, not the best in the world, but still unusual as transportation development goes, were at hand, sufficient to carry 22,000 men into and out of the yard.

Is that correct?
Mr. TOWLE. No, sir; it is not.
The CHAIRMAN. You think they are not adequate for that?
Mr. TOWLE. They are adequate to carry about 10,000, I should say. The rest of the men have to go in by trucks and motors and anything of that kind they could find.

The CHAIRMAN. Does the Emergency Fleet Corporation transport them at its expense?

Mr. TOWLE. It is a very badly mixed-up problem. Some truck drivers pick up a load and take them for nothing; others sometimes charge 5 cents apiece, and it is a very badly mixed-up management.

The CHAIRMAN. Whose trucks are they?

Mr. TOWLE. They belong partially to the Emergency Fleet—that is, the American International Corporation, and partly to some private concerns whose trucks happen to be on the island.

The CHAIRMAN. Concerns are allowed to go in there and get what business they can, I suppose?

Mr. TOWLE. There was an arrangement made with some firm in Philadelphia for transporting men in and out of the island—I am not sure whether that arrangement is in force yet or not—by motor.

The CHAIRMAN. The question is, Does the Emergency Fleet stand the expense of that truck business?

Mr. TOWLE. Oh, yes; the Emergency Fleet pay all of that.

The CHAIRMAN (reading):

Roadways of standard construction have been built into and through the island.

That is correct, I believe you say?

Mr. TOWLE. Yes, sir.

Senator JONES. Wait a moment, Mr. Chairman. (To Mr. Towle): You said a moment ago that sometimes the men paid on these busses and sometimes they did not.

Mr. TOWLE. Yes.

Senator JONES. And then you said that there were some private busses, as I understood, and then some of the Emergency Fleet. What did you mean by that? And then, later, you said the Emergency Fleet paid for all this transportation?

Mr. TOWLE. The Emergency Fleet paid this company for furnishing these trucks to help transport the men back and forth; that was so much a day per truck.

Senator JONES. Then, would they be permitted to charge the men?

Mr. TOWLE. Not that firm; no. But if, for instance, a lumber firm had sent down there a load of lumber, and the truck driver was ready to leave at 4.30, and maybe it was not quite that time, he might wait and pick up a gang of men and charge them 5 cents apiece.

Senator JONES. Then he would not charge up anything to the Emergency Fleet Corporation for that?

Mr. TOWLE. No; they would not charge up anything to the Emergency Fleet Corporation. He would just put that in his pocket.

The CHAIRMAN. That was not a regular provision? There was no fixed schedule?

Mr. TOWLE. None whatever. As I say, it was a very badly mixed up affair.

The CHAIRMAN (reading):

* * * housing facilities for many thousand men completed. * * *

You agree to that, I believe?

Mr. TOWLE. Yes; there are 4,000 now.

The CHAIRMAN (reading):

* * * administration, engineering, and other necessary buildings completed by the acre?

[r. TOWLE. Yes; there are a lot of buildings completed.
he CHAIRMAN (reading):

* * freight lines built into the yard and tracks laid sufficient to permit unloading of 250 freight cars per diem * * *

s that correct?
[r. TOWLE. Yes, sir; they can handle 250 cars a day.
'he CHAIRMAN (reading):

* * a water system has been installed and electric power introduced.

Ir. TOWLE. The electric power is there; the water system is not in yet.
'he CHAIRMAN. What does that consist of, the water system?
Mr. TOWLE. There are two lines of water system; one is a high-essure line for fire purposes, with an average of about 16-inch pipe, d another line for domestic purposes, about an 8-inch pipe. But ose are not completed, any of them.
Senator NELSON. Where do you get the water from?
Mr. TOWLE. The water will come from the Delaware River.
The CHAIRMAN. Would it be filtrated water?
Mr. TOWLE. Yes; the domestic water will be filtrated; they have a ecial plant there for that.
Senator NELSON. Is the water in the Delaware River fresh up there?
Mr. TOWLE. Yes; it is.
Senator NELSON. I did not know but what the tide run up there.
Mr. TOWLE. The tide runs up there, but it does not bring salt water.
The CHAIRMAN. You are going to have a sewage system?
Mr. TOWLE. Yes; they are building the sewage system also.
Senator JONES. That says completed.
The CHAIRMAN. Says a water system has been installed and elec-ic power introduced.
Senator JONES. What does it say about sewage?
The CHAIRMAN. It does not say anything about sewage.
Senator JONES. I thought it did.
The CHAIRMAN. That was my inquiry. [Reading:]

The essential features of the shipyard, the 50 shipways along the water ont, have reached an advanced stage of completion.

Do you agree to that?
Mr. TOWLE. I would not say it is advanced; no; it is about 30 per ent completed.
Senator NELSON. There are 12 ways that have not done anything t all, I understand.
Mr. TOWLE. Twelve ways there which nothing has been done on.
Senator NELSON. And only three or four that are pretty nearly eady.
Mr. TOWLE. There are about four that could be used now to lay els.
Senator NELSON. And as to the balance, when will they be ready—mean those that you commenced work on?
Mr. TOWLE. They ought to be finished up so that they could lay els in about 45 days, but that would not complete the entire way.
Senator NELSON. I mean, outside of the 12 that nothing has been ne on.

Mr. TOWLE. There will be none of them that will be entirely done, because the water end of the way necessitates making a cofferdam to do the work. You see, a portion of this work is below the water line. The piling are cut off and the caps are put down about 4 feet under the water, and they have to construct these cofferdams in order to get at that work.

Senator NELSON. For the ways?

Mr. TOWLE. For the ways.

Senator NELSON. That is in that low part in the center?

Mr. TOWLE. No; that is out in the river; right on the edge of the river.

Senator JOHNSON. Did the Emergency Fleet Corporation ever do anything else except expostulate with these gentlemen who were in charge of this contract on Hog Island?

Mr. TOWLE. I could not tell you that; most of the conferences of the officials were held here in Washington, and I was not present.

Senator JOHNSON. Your expostulations, however, were very frequent, were they not?

Mr. TOWLE. Yes; I became very unpopular down there.

The CHAIRMAN. If there are no other questions, I believe we will excuse Mr. Towle.

Senator VARDAMAN. You are a civil engineer?

Mr. TOWLE. Yes, sir.

Senator VARDAMAN. And are accustomed to this sort of work?

Mr. TOWLE. Yes, sir.

Senator VARDAMAN. How do these prices paid for the work that has been done there compare with the prices that were paid for similar work in normal times?

Mr. TOWLE. You mean, what is the cost of the work?

Senator VARDAMAN. The price for work that has been done. How do the prices that the Government is paying for it compare to normal times?

Mr. TOWLE. The Government is not paying any fixed prices for this work: they are paying whatever it costs them. But the work is costing, I would say—that is, that part of the work that can vary in cost, the labor end of it—the material end is pretty well fixed—is costing three times what it would in normal times.

Senator VARDAMAN. Is that not true of material used?

Mr. TOWLE. In some cases the material has been purchased very reasonably; in others the Government, I think, has been held up.

Senator VARDAMAN. Do you know how those purchases have been made for lumber?

Mr. TOWLE. Yes, sir; I do.

Senator VARDAMAN. How have they been made—by competitive bids or just sending some men out and buying it?

Mr. TOWLE. On account of the hurry of the work and the congestion a large part of that material and lumber was bought locally from Philadelphia dealers and they asked an increase of something like $15 to $18 a thousand over the wholesale price that the Emergency Fleet could purchase it at were they permitted to ship it in. In order to get these prices, however, from the Philadelphia dealers the purchasing department asked at least three of them to quote. As a matter of fact, they all quoted the same price, and they all got the price they wanted.

nator VARDAMAN. You have not seen very much manifestation atriotic desire to serve the Government, either in prices of mate-or for personal service?

r. TOWLE. Only on very rare occasions.

nator CALDER. Mr. Towle, you said the labor cost is three times of normal times?

r. TOWLE. Yes, sir.

nator CALDER. Was that given to the labor, or was it because of e of time?

r. TOWLE. The labor would eventually get all of that, but the unt of work performed by the labor was only one-third of what ould have been and should have been under right conditions.

enator CALDER. How is it that somebody did not pick them up insist upon a day's work being done?

Ir. TOWLE. We checked it up as soon as we could; we sent in re-ts of costs; out of report which I made up myself Mr. Piez trans-ted to you his figures for the cost of the work.

enator CALDER. In other words, the men were doing about one-rd of a day's work?

Ir. TOWLE. Yes.

Senator CALDER. Is that the fault of the men or of the supervision?

Mr. TOWLE. I think largely the fault of the foremen and the super-endents.

Senator VARDAMAN. Really, no consideration has been given to the t. It has just been simply a ridiculous prodigality of public nds. Does it not strike you that way, as a sensible and conservative siness man?

Mr. TOWLE. Yes, sir; those have been my ideas and impressions all ng.

Senator VARDAMAN. Do you not think that if the same ingenuity d been displayed in the doing of the work and securing of the terial that was expended in robbing the Government they would ve had the fleet built before this time?

Mr. TOWLE. You are getting into politics now.

Senator CALDER. Mr. Towle, I have had experience in construction tters. I can not understand how a project of this kind could be mitted to go on and men work as they have. Was there not some there to insist upon the work being done properly and effectively d speedily? Whose job was that?

Mr. TOWLE. That is supposed to be the job of the agents, to direct t work; that is what they were given the contract for.

Senator CALDER. Did you ever make a report upon the way the work s being done?

Mr. TOWLE. Oh, yes; almost daily.

enator CALDER. And repeatedly called the attention of the Ship-g Board to the fact that time and money were being wasted?

Ir. TOWLE. I sent the report to Commander Reed in his office.

enator CALDER. Setting forth these facts; and it was a month be-the remedy came?

r. TOWLE. Yes, sir.

he CHAIRMAN. Is there any trouble about getting labor, Mr. le?

r. TOWLE. None whatever.

The CHAIRMAN. You can get plenty of labor?

Mr. TOWLE. Yes; but, of course, it is not the best labor.

The CHAIRMAN. We understand that, but the supply is there, and the men could be trained?

Mr. TOWLE. Yes, sir. If these men could be furnished with good transportation back and forth from Philadelphia—quick transportation and comfortable transportation—you would have no trouble in getting all the men there you wanted.

The CHAIRMAN. A great deal of this work done up to this time has not required very highly skilled labor?

Mr. TOWLE. That is true; mostly common labor—not altogether, because on the pile-driving gangs they are carrying 5 mechanics to 1 laborer. They call them "mechanics"; classed as mechanics.

Senator NELSON. What have you been paying for common laborers there?

Mr. TOWLE. It runs about 40 cents an hour.

Senator NELSON. For eight hours?

Mr. TOWLE. Yes; about 37 cents on an eight-hour basis, and then they pay one and a half times for the remaining two hours; they work 10 hours and get 11 hours' pay.

The CHAIRMAN. What do the mechanics get?

Mr. TOWLE. They get, all of them, from 60 to 80 cents an hour.

Senator JOHNSON. In what other respects than those you mentioned did you have in mind that the Government had been held up on material?

Mr. TOWLE. In other respects?

Senator JOHNSON. Yes.

Mr. TOWLE. I think the west coast men asked too much for their product.

Senator JOHNSON. What product was that?

Mr. TOWLE. Fir, to be used for the timber of the ways.

Senator NELSON. Talk a little louder.

Mr. TOWLE. The west coast men asked too much for their product. They made a basis of $20 for the common planks, and then increased the price on up to $28 at the mill.

The CHAIRMAN. What is the transportation cost of that, do you know?

Mr. TOWLE. I am not positive what the freight rate is.

Senator NELSON. It costs more than the lumber?

Mr. TOWLE. It costs a little more than the lumber.

Senator JOHNSON. Was there any other, particularly of materials?

Mr. TOWLE. Yes; in the gathering in of machinery, for instance, an ordinary crane that you should buy for $7,000 or $8,000, we were compelled to pay $20,000 or $25,000 for it, in extreme cases.

Senator JOHNSON. Three or four times as much?

Mr. TOWLE. Three times, I should say.

Senator JOHNSON. Where did they come from?

Mr. TOWLE. They got them everywhere, all over the United States.

Senator JOHNSON. That is, anybody who had anything to sell would immediately shove the price up to the Government; is that about the size of it?

Mr. TOWLE. That is the way it looked to me.

Senator NELSON. And they got what they asked?

[r. TOWLE. Not altogether; I would not say that, altogether.
enator JONES. Mr. Towle, speaking of these west coast fir people, were they that put these prices up?
r. TOWLE. I understand that there was a bureau here in Washon that handled that matter.
enator JONES. The Emergency Fir Bureau?
[r. TOWLE. Yes, sir; I think so.
enator JONES. And you say that they put the price of fir up $20 28 at the mill?
[r. TOWLE. Yes, sir.
enator JONES. Where did you get that information?
[r. TOWLE. I got it off the invoices, some of it; and I knew and ed to different people about it who knew the conditions. I also w from the other end, from the West coast end, since we have urchasing office for our wholesale lumber company at Tacoma.
enator JONES. Who is that?
Mr. TOWLE. The Nebraska Bridge Supply & Lumber Co.
enator JONES. That is this private purchasing agent of this yard?
Mr. TOWLE. No; that is our own purchasing agent, and through m we received this same information, that the Government was ying $20 base price for fir lumber on the coast.
Senator JONES. That is an increase of $20, you mean?
Mr. TOWLE. No, no; that is the price they paid; that is an increase about $6 to $10 a thousand over the market at that time.
Senator JONES. I understood you to say awhile ago that they ineased the price $20 to $28.
Senator NELSON. From $20 to $28.
Mr. TOWLE. Oh, no.
Senator JONES. Let us get at the facts.
Mr. TOWLE. I want to explain that. The schedule of prices ran om $20 for the short sizes up to $28 for the heavy timbers, which as an increase, I said, over what the market was at the time.
Senator JONES. Do you know about how much increase?
Mr. TOWLE. Well, my judgment was from $6 to $10.
Senator JONES. That is your judgment, but have you any facts?
Mr. TOWLE. Yes, I have.
Senator JONES. What was the increase?
Mr. TOWLE. I say the base increase was about $6.
Senator VARDAMAN. I notice here that three men were employed follows: R. N. Hunt, publicity assistant, $666.66 per month; Mr. T. Pierce, publicity manager, $833.33 per month; Thomas B. ed, publicity assistant, $500 a month. These gentlemen, I underind, are the editors of this little paper. Did that really accomish anything other than furnishing a pretty good story for some y delightful gentlemen?
Mr. TOWLE. The idea was to create interest in the job among the ployees.
enator VARDAMAN. The press, ordinarily, the industrious metroitan newspaper, did not take enough interest in it to give the ice to the world?
[r. TOWLE. I think they did; but the idea was that the notices ıld be the right kind and have the right information.
enator JONES. These men are supposed to have permanent posia, I suppose?

Mr. TOWLE. I could not tell you that.

Senator JONES. They are still at work; that is, they are still drawing their salaries?

Mr. TOWLE. They were the last I knew; they were on the job.

Senator NELSON. Do you have the same publicity bureau now?

Mr. TOWLE. I do not know; that is entirely out of my department. They are not down on the island; they are at the uptown office.

Senator CALDER. These salaries were charged to the overhead expenses of the Government?

Senator VARDAMAN (interposing). Overhead or underfoot somewhere; they were charged.

Senator NELSON. Or under the ground.

Senator JOHNSON. They will transfer those activities to the Bureau of Public Information now?

Mr. TOWLE. I understand Admiral Bowles is taking over the entire Publicity Bureau and he is going to handle that himself.

Senator NELSON. That may relieve us of two or three salaries.

Senator VARDAMAN. Do you not think that will raise a protest, and that the agents of the Government there may ask you to not remove them?

The CHAIRMAN. When you say, Mr. Towle, that the ordinary press, perhaps, did not give the right kind of information, do I gather that you meant these gentlemen were merely expected to boost the International Corporation?

Mr. TOWLE. I did not get that.

The CHAIRMAN. Were these gentlemen mainly expected to boost the American International Corporation and its officers?

Mr. TOWLE. I do not remember making any statement about that.

The CHAIRMAN. No; you did not. You said, however, that the ordinary press did not seem to give the right kind of information, and therefore it was expected that these gentlemen would supply that.

Mr. TOWLE. I said these gentlemen were employed to see that the press did give the right kind of information about the work; that is what I understood their work was.

The CHAIRMAN. You do not want us to understand that they were largely employed to boost the International Corporation?

Mr. TOWLE. No; I would rather not make any remark on that.

Senator VARDAMAN. As a matter of fact, had any criticisms been made or published in the metropolitan newspapers in the way of censorious criticism, of loose and extravagant method of conducting the affairs of that enterprise?

Mr. TOWLE. I think one newspaper in Philadelphia published a number of articles on that question.

Senator VARDAMAN. Was that before these publicity agents were employed?

Mr. TOWLE. Before they were employed?

Senator VARDAMAN. Yes.

Mr. TOWLE. Oh, no. They have been in the employ of the company ever since the beginning, as I understand it.

Senator CALDER. That occurred after this investigation began here?

Mr. TOWLE. Not altogether. I understand that there were some articles before.

e CHAIRMAN. Do you know of any instances of contracts being
r material and concessions or anything pertaining to this work
on favoritism or political influence?
. TOWLE (after a pause). I wish you would not insist upon me
ering that question.
ator JOHNSON. You have answered it by your hesitancy. You
t just as well answer it now. [Laughter.]
. TOWLE. I can not say that there is any marked—I will simply
er by saying that is entirely out of my department, and I have
sitive knowledge.
ator VARDAMAN. Mr. Towle, you are in the employ of the Gov-
ent of the United States, charged with a very serious duty and
nsibility. We represent the people of the United States, who
pay the expenses, and I believe you owe it as a patriotic duty,
know anything of that kind, to tell it.
. TOWLE. I do not know, positively.
ator VARDAMAN. Or, if you can give this committee any infor-
n whereby it can run down the scoundrels and bring them to
e, you will be performing a patriotic service.
. TOWLE. I will tell you, I think the men there with the Ameri-
nternational are all trying to do the best in performing their
on this job, and most of them, at least, are absolutely on the
e. They may have had some friends or favorites they wanted
e special work to, and you can not blame them for that. They
bly looked around——
ator VARDAMAN. You think these men are competent, men of
business ability, and, if they are, who is responsible for the
asance and misfeasance and incompetency as manifested in
anagement of the affairs of the corporation?
. TOWLE. I do not think they are all competent.
CHAIRMAN. Do you know of any instances where the people
et the contract are interested themselves in the contracts or sub-
acts?
. TOWLE. There is one instance, I think, of Mr. Holbrook; at
I understand that he is the vice president of the American
ational Corporation, which is the parent company, and he is
sted in one of the subcontracts.
CHAIRMAN. Which one?
. TOWLE. The subcontracts for the wharf and the wet basin

CHAIRMAN. That involves how much of an expenditure?
TOWLE. An estimated expenditure of about $1,600,000.
ator VARDAMAN. What fee would that company get out of

TOWLE. They get a rental fee for the equipment of $260,000,
profit fee of $75,000.
CHAIRMAN. What company is that?
TOWLE. It is the Holbrook, Cabot & Rollins Co.
CHAIRMAN. Where are they located?
TOWLE. New York and Boston.
ator JOHNSON. Are there any others involved? Inasmuch as
ubject has been opened and you hesitated concerning your
r—any other contracts that were given from favoritism or to
who were connected with the work at all?

Mr. TOWLE. There was one contract given to Stone & Webster for the furnishing of experts at an increase of 100 per cent over the salaries that the men were drawing; that is, the company would receive 100 per cent for the services of these men.

Senator JOHNSON. I wish you would explain that. I do not grasp it from what you say, Mr. Towle. A contract—what sort of contract, please, was that?

Mr. TOWLE. That is for expert and consultation work.

Senator JOHNSON. Who made the contract—the American International with Stone & Webster?

Mr. TOWLE. Yes, sir.

Senator JOHNSON. The contract was made for what?

Mr. TOWLE. For the furnishing of these experts for the purpose of consultation.

Senator JOHNSON. That is, for furnishing the know-how experts!

Mr. TOWLE. I take it as that.

Senator JOHNSON. These were experts upon what?

Mr. TOWLE. Any and everything, I suppose.

The CHAIRMAN. How many and for how long?

Senator JOHNSON. Yes.

Mr. TOWLE. Just as they would need them. Understand, they were not employed in the contract—merely a provisional contract.

Senator JOHNSON. Let us get that right. The American International made a contract with Stone & Webster, the basic corporation of the American International, by which Stone & Webster should furnish, as required, experts for anything and everything. Is that correct?

Mr. TOWLE. Yes.

Senator JOHNSON. And Stone & Webster should be paid an advance of how much?

Mr. TOWLE. One hundred per cent.

Senator JOHNSON. One hundred per cent for those individuals, and all of that should be paid by the Government?

Mr. TOWLE. I guess you have got it right.

Senator JOHNSON. Is that contract in writing?

Mr. TOWLE. I think it is.

Senator JOHNSON. Do you know whether any experts have been furnished under this contract?

Mr. TOWLE. I do not.

Senator JOHNSON. Are you aware whether there have been any employments of any sort under it?

Mr. TOWLE. I do not.

Senator JOHNSON. Have you a copy of that contract?

Mr. TOWLE. I think it is in the office in Philadelphia.

Senator JOHNSON. You have not it with you?

Mr. TOWLE. No, sir.

Senator JOHNSON. How long ago was that contract made, please!

Mr. TOWLE. I should say 30 days ago.

Senator JOHNSON. Did you approve it?

Mr. TOWLE. I did not; no, sir.

Senator JOHNSON. Did you object to it?

Mr. TOWLE. It was not put up to me for approval.

Senator JOHNSON. Who approved it on behalf of the Emergency Fleet Corporation, if anybody?

Mr. TOWLE. I am not positive about that.

Senator JOHNSON. Did these experts relate to putting together bricated ships?

Mr. TOWLE. It did not: as I remember reading the contract, it did t say.

Senator JOHNSON. Did it describe experts in any way except genally that they were to be experts who might be utilized under the ntract that we have been discussing here with the American Interational?

Mr. TOWLE. They were merely the regular employees of the Stone Webster people, out of their Boston office, who might be called ito consultation on any subject whatever—a kind of a general proision made in case they were called in—that their services could be tilized and that they would receive 100 per cent advance on their alaries. The company, in other words, would take an equal amount o the men.

Senator VARDAMAN. How many men?

Mr. TOWLE. How many?

Senator VARDAMAN. Yes.

Mr. TOWLE. It did not specify at all.

The CHAIRMAN. They were to get their salaries, as now paid by Stone & Webster, plus 100 per cent.

Mr. TOWLE. That is, the company would receive this 100 per cent increase. For instance, if a man was drawing $500 a month, then, the company should receive for his salary for his services $1,000 a month.

Senator JOHNSON. Commander Reed wants to say a word.

Commander REED. I can throw a good deal more light on that. It came within my field and I approved the contract. A large number of these employees of the American International Shipbuilding Corporation were originally Stone & Webster men and they were transferred from Stone & Webster to the American Shipbuilding Corporation for this work and put on the pay roll of the American International Shipbuilding Corporation. They found in addition to these men it was conducive to the progress of their work to call in special experts from Stone & Webster who could not be spared all the time and who would not be needed all the time, but some of the higher men, the chief engineer of Stone & Webster, who was a gentleman by the name of McConnell, of very fine reputation as an engineer, a very fine engineer, I think, to call him in and ask him about particular things which might come up; but they did not wish to. In fact, Stone & Webster would not release him for continuous service and they did not need him for continuous service, and the question was how these men were to be compensated, how Stone & Webster were to be compensated; and it was explained that Stone & Webster, when in the service of private interests, for technical advice, or consultation or examinations, appraisals, and reports, that they found that the cost of operating their main office in Boston was practically 100 per cent in excess of the salaries of the technical employees; that is, if they took the salary list of their engineers in Boston that that would represent about half of the cost of operating their Boston office, the remaining 100 per cent being ay of stenographers, rent, heat, light, the compensation of the ficers of the Stone & Webster corporation, and other miscel-

expenses, telephone, telegraph, etc. So that they considered the pay of a technical man plus 100 per cent to be the cost of having these men available for consultation or advice, and it further appeared that in dealing with private interests when they sent one of these men out that their practice was to bill private interests at the rate of three times the man's salary; that is, once for the man's salary, another time for the overhead expenses of Stone & Webster's office, and a third time for their profit of their business, and that this charge of 100 per cent on the man's time was assumed—just simply covered the cost to Stone & Webster of having that man and being able to send him down there for a few days and take him back again. It was considered that did not mean any profit to Stone & Webster.

Senator JOHNSON. Have any of them been utilized?

Commander REED. There have been men utilized a few days—Mr. McConnell has been utilized a number of times.

Senator JOHNSON. Do you know what the item was for his being there a few days, how much was paid to Stone & Webster?

Commander REED. I do not know; I do not imagine—in fact, I am quite sure it has not represented any large amount as yet. The contract is there and provides, as all our contracts do, that as required by the Emergency Fleet Corporation, American International Corporation agents; that is, the Emergency Fleet Corporation at any time could tell them not to employ anybody under the contract or insist upon employing anybody.

Senator JOHNSON. But there have been some employments?

Commander REED. There have been some employments. I am not sure whether there have been any payments. The auditor could inform you as to that.

Senator JONES. The Emergency Fleet Corporation's signature is to that contract?

Commander REED. That contract was offered and approved by me as representative of the Emergency Fleet Corporation, and it has been sent to the Emergency Fleet Corporation for their information and files, and it has been in their hands for some weeks.

Senator JONES. And the Emergency Fleet Corporation is signed to it by the agent, the American International? The reason I ask that is that this other subcontract discussed a while ago was signed apparently in that way, the Emergency Fleet Corporation by American International Corporation, agents?

Commander REED. Yes, sir; practically all of their papers, bills, vouchers, and checks are drawn in that way.

Senator JOHNSON. Mr. Towle, do you know any other instances than this?

Mr. TOWLE. Nothing to amount to anything.

Senator JOHNSON. All the rest are so petty that we could disregard them?

Mr. TOWLE. There are a few small orders placed for tools and machinery and stuff which really does not amount to anything.

Senator JOHNSON. Do you know whether they were placed with corporations in which any of those of the American International Shipbuilding Corporation were interested?

Mr. TOWLE. There is one case of little saw machines which were brought up from the cantonment at San Antonio and put on to this job that belonged to Stone & Webster

Senator JOHNSON. The Government paid for them?
Mr. TOWLE. I am not sure whether the Government paid for them not. We rejected most of them. I am not sure whether they have not.
Senator VARDAMAN. What did the contract amount to; how much d the entire bill amount to, do you remember?
Mr. TOWLE. It ran about, I should say, $10,000.
Senator VARDAMAN. What were the items?
Mr. TOWLE. Little saws, band saws, and things of that kind run gasoline engines.
Senator VARDAMAN. You rejected most of them?
Mr. TOWLE. Yes, sir.
Senator CALDER. Mr. Towle, when did you begin your employment ere?
Mr. TOWLE. I actually began my employment on the 24th day September, although I was there on the 20th.
Senator CALDER. Are you still assigned there?
Mr. TOWLE. I am.
Senator CALDER. Your employment there will probably be under dmiral Bowles now?
Mr. TOWLE. Yes; indirectly under Admiral Bowles.
Senator VARDAMAN. What is your salary?
Mr. TOWLE. $250 a month.
Senator JONES. I hope Commander Reed will furnish us a copy f that contract to put in the record.
The CHAIRMAN. The committee will now recess until two o'clock his afternoon.
(Thereupon, at 1.35 o'clock, p. m., the committee took a recess until o'clock this afternoon.)

AFTER RECESS.

The hearing was resumed at the expiration of the recess.
The CHAIRMAN. Mr. Bohlen, we will hear you now.

STATEMENT OF MR. FRANCIS H. BOHLEN, ATTORNEY AT LAW, PHILADELPHIA, PA.

The CHAIRMAN. Mr. Bohlen, please state your name.
Mr. BOHLEN. Francis H. Bohlen.
The CHAIRMAN. And your place of residence and your profession occupation?
Mr. BOHLEN. My residence is 514 Woodlawn Terrace, Philadelhia. I am an attorney at law and am a professor of law at the niversity of Pennsylvania..
The CHAIRMAN. Mr. Bohlen, are you acquainted with what is own as Hog Island, near Philadelphia?
Mr. BOHLEN. I am, very well. .
The CHAIRMAN. Did you have anything to do with the sale or reement to sell that property to the American International Corration?

Mr. BOHLEN. I had to do with the sale of the upper 400 acres—the 400 acres nearest the city of Philadelphia. I had nothing to do with the sale of the land which lay below, on the river and behind the Government jetty.

The CHAIRMAN. Do you know how many people were interested in the entire tract?

Mr. BOHLEN. I know that the people interested in the upper tract were Mr. Charles N. Black, of New York, now in the Ordnance Department; his brother, James D. Black; and the estate of his sister, who was Mrs. Pierce Bailey, of New York, Dr. Pierce Bailey's wife; my three brothers and myself—Edward M. Bohlen, Robert M. Bohlen, Charles Bohlen, and Francis H. Bohlen; and my three cousins, the daughters of Richard C. McMurtry, of Philadelphia: Miss Ellen McMurtry, Miss Mary D. McMurtry, and Mrs. Caroline Wright.

The CHAIRMAN. That had reference to about 400 acres of, you might say, the northern part of the entire tract?

Mr. BOHLEN. Exactly.

The CHAIRMAN. Next to that came another tract, south of that. How many acres are there in that tract?

Mr. BOHLEN. There are, I think, about 450 acres in that tract. That was owned by the Black interests, and I understood that it was owned in common between the three—Charles N. Black, James D. Black, and Mrs. Bailey.

The CHAIRMAN. That comprised the entire island?

Mr. BOHLEN. That comprised the entire area.

The CHAIRMAN. You might say two groups of people owned each of these tracts making up the whole?

Mr. BOHLEN. The ownership of the two tracts was distinct in this sense, that the Black interests owned exclusively the lower tract and the Bohlen and Black interests together owned the majority of the upper tract.

The CHAIRMAN. Now, Mr. Bohlen, begin with your negotiations which finally culminated in the transaction with the International company.

Mr. BOHLEN. We, of course, had this property, like all properties for sale, in the hands of an agent—Mr. Claghorn, of Philadelphia. We had effected a sale of some 60 acres immediately before. The first intimation I had that the Government was interested, or that the International Corporation was interested, was one night in June, as I remember—my memory for those particular dates is not very specific—when a Mr. Joseph A. Steinmetz, of Philadelphia, called me on the phone at my house and asked me to go with him the next day to New York.

I met him on the train, and he then informed me that the people whom he then described as the Stone & Webster people were interested in this property of ours for a shipbuilding proposition. I went to the office of Stone & Webster, in the Equitable Building, I think, the twenty-third floor, and there met one of the vice presidents, a Mr. Stevens—whether vice president of the International Corporation or of Stone & Webster, I really do not know. The various organizations run so closely together that I really do not know which he represented.

At that time, apparently, he did not know that any other person in myself was interested in this land. Luckily, however, Mr. ack was then working under Mr. Stettinius, in J. P. Morgan & Co., purchasing supplies for the allies. I got in immediate touch with n, and he came over.

At that time we asked, as I remember it, how much of the land he sired, and he informed me he had use only for the upper 400 acres. at land, as I said, the bulk of it, was owned by Mr. Black and the iley and McMurtry interests in common. There was a tract of 90 es which was owned exclusively by Mr. Black. We then talked out the price, and we stated that we valued the property at $2,500 acre. That had been our asking price up to that time, except in e case of Mr. Henson.

The CHAIRMAN. Was that your asking price for the entire tract in e sale or was it by the acre?

Mr. BOHLEN. The asking price of the upper land, the land in hich I was interested.

The CHAIRMAN. I mean, was that the asking price in case you sold all in one transaction or in case you sold 5 acres or 2 acres?

Mr. BOHLEN. We had expected to sell it in small blocks to manufacturing industries, where there was a large demand for it, and there were a good many negotiations pending at substantially those figures, some a little higher and some a little lower. Nothing came of those negotiations, of course, because this property was then sold to the International Corporation at that figure. I got the impression that the land was being bought for the Government and went away. I demurred at the decrease from $2,500 to $2,000, which they fixed as their outside limit. In fact, they intimated we had better sell, not only as a patriotic duty, but as, perhaps, a matter of compulsion. So, finally, after consultation with Mr. Black, we agreed that while it was not what we had hoped we would get in the near future if we preserved the land and sold it in small lots, we would accept that price. The price actually fixed, as you will see by the option, if you have it, was $2,100 an acre, $100 of which was to go to the vendees as commissions for their turning it over and, as I understand, acting as agents for the Government in the purchase for the Government.

The CHAIRMAN. Who were they?

Mr. BOHLEN. Either the International Corporation or Stone & Webster. The option as signed will show, I think, that it was the International Corporation.

I have here a rough plan, which I have drawn myself, showing the elative positions of the various tracts in question [exhibiting sketch o the committee]. The upper tract, in which we were interested, ontained, as I say, about 400 acres. Originally it contained about 60 acres, 60 acres having been sold to Mr. Henson. A large part of had been filled, by very favorable arrangements we got with the merican Dredging Co. There was a large part of it that had been led to an average of 10 feet above high water; at least that was the ntract with them, and we finally paid them on that basis.

I might say that at about the end of our water front a Government tty is built, as you probably know, which runs at an acute angle th the original river bank, cutting off the land back of it from the

channel. Our land was all situated above the channel; it was all filled land, and it lay within a few hundred feet of the 30-foot channel.

In between the dike and a part of this land there had been filling. That gave to the land immediately back of it, of course, the same access to the deep-water channel that our fast land had.

The CHAIRMAN. Is the dike in front of your land?

Mr. BOHLEN. There was no Government jetty in front of our land.

The CHAIRMAN. Is there a dike there?

Mr. BOHLEN. Stone banks. That tract which ran out to and included this fill was included in the 400 acres in question. That tract was owned exclusively by Black, and regarded, as it were, as a substantial part of the whole tract, and they arranged with us that it was to be sold together. The other land he was to sell himself. In fact, I did not know that the lower land had been sold until some week or two afterwards, when I was told that the International Corporation had decided they needed more land than they originally thought; that they needed the whole 840 acres, including Black's as well as ours, and they had just made an entirely separate arrangement with Black, for which they took another option.

The CHAIRMAN. Do you know what the terms were as to his land?

Mr. BOHLEN. I know they were the same as to price as the land we had sold—$2,000 an acre.

The CHAIRMAN. And $100 additional to the agent?

Mr. BOHLEN. That was never paid, or never taken into account. In the final settlement, as I understood, it had been determined the land would be taken over directly by either the International Corporation or one of its subsidiaries. That $100 an acre was never included in the final settlement, and I understood it was dropped out of the transaction because they had determined to act as principals and not as agents.

The CHAIRMAN. How much frontage did your land have?

Mr. BOHLEN. The actual number of feet I ought to know, but I really, for the moment, forget. It is a very considerable frontage. I know; something like 2 miles originally.

The CHAIRMAN. Were there any ways to be built on land that you formerly owned?

Mr. BOHLEN. I understand the actual ways are to be built on that land, and the land bought from Mr. Black is being used for the "wet basin," so-called, and for fitting-out shops. I have seen the rough plans, but, of course, I am not very conversant with them. I have never been on the premises, although I have been meaning to go down there.

The CHAIRMAN. Do you mean to say you think $2,000 an acre was a fair value for that land?

Mr. BOHLEN. We think it was. We sold to Mr. Henson—under an option given to him some month or so before we knew the United States Government was interested—a piece of land above for the $2,000. That land is, in some ways, not as good as the land we sold to the Government, because it was not filled. The filled basin stopped a little short of the line of the property sold to Mr. Henson. It had proportionately a little more river frontage, which he wanted because he was buying the land for a lumber yard. It included much less of the filled land.

The CHAIRMAN. Was all the land you sold to the Government ove water at high tide?

Mr. BOHLEN. All of the front part of it was. Some little of the ck land was low, but I think all of it was above high water. The ont part of it was, at least, about 10 feet above high water. I know settled, as I say, with the American Dredging Co. on the basis proved by their engineers that they would fill this land to that ight.

I might say, if I may explain one thing, that a tract of land of is size is only saleable in a single tract until there are railroad mmunications. About early last spring the Westinghouse Co. ving located its plant at Eddystone, the Pennsylvania Railroad sired to build a spur from Chester through Eddystone, and com- g into Philadelphia. We succeeded in getting them to locate their ght of way along back of our property, so that after the spring of 17 intsead of having land which would have had to have railroad cilities brought to it by the purchaser, we had a tract of land hich had deep-water frontage and a certainty of railroad access irectly in the rear.

The moment we secured the railroad access we were in a position offer the land not merely to some large speculating company, but factories or to businesses like the lumber business of Mr. Henson, nd we could then get a very much better price than we could have efore we were certain of railroad communication.

Senator VARDAMAN. How much of this land was under tidewater?

Mr. BOHLEN. I do not think there was any of it under tidewater—one of it was under tidewater.

Senator VARDAMAN. When did you have that levee or dike built indicating on sketch map]?

Mr. BOHLEN. That dike was built, I suppose, 40 years ago. In ct, the dike was the occasion of my family's interest in the mat- r, because my father and uncle loaned to Mr. Black, who had reviously owned it, the money to build the dike with. They were rsonal friends of his, and he had an idea that would increase the lue of his property, and we loaned the money to him, and bought the property on the mortgages that we received as security for e money so loaned.

Senator VARDAMAN. I think the witness who preceded you on the and testified that some of this land, but for this dike, at high tide ould overflow something like 8 feet.

Mr. BOHLEN. I do not think that is correct; there may be some nd in back here [indicating] along the creek channel which would in that position.

Senator VARDAMAN. I think he said about 300 acres.

Mr. BOHLEN. Not all that, because there are only 320 acres in that hole tract, and this is at least 120 acres in this filled tract; that is r impression. Also, a good deal of it was high land before that was made. We can send to you—I am sure we can get from the nerican Dredging Co. a survey.

Senator VARDAMAN. That is not necessary.

Senator JOHNSON. Was there an option outstanding upon this operty at the time this option was given to this gentleman?

Mr. BOHLEN. There was not. There was an option given through a man named Chasson, in New York, during the autumn of 1916, at which time there was no intimation that we would get the railroad facilities, which came in the spring of the next year. That option I myself had considerable hesitancy in granting, and when the Chasson interests failed to make any payment on it and asked an extension we refused to extend it, believing we had undervalued the land therein.

Senator JOHNSON. Was $2,500 paid on that option?

Mr. BOHLEN. I think $2,500 was paid on that option; something of that sort.

Senator JOHNSON. That option expired, when?

Mr. BOHLEN. That option, if my memory serves me, expired about February or March—February, my impression is—1917.

Senator JOHNSON. Do you object, Mr. Bohlen, to stating what that option price was?

Mr. BOHLEN. The option price was $1,000 an acre for the entire tract. But at this point I would like to say this: You can understand that, as we had determined to sell Black's interests and ours together, there was an arrangement between us for the mutual valuation of the various tracts, and the amount which our interests would have received would have been, as I remember it, between $1,200 and $1,300 an acre. That was at that time, including the Reeves tract, regarded as being of considerably more value than the lower land.

Senator JOHNSON. Did that option include the entire 846 acres?

Mr. BOHLEN. It included originally the fast land within the river banks, and then was changed, as I remember it, to include also that land between the river bank and the Government jetty.

Senator JOHNSON. Does that aggregate 846 acres?

Mr. BOHLEN. I think it is 846 acres.

Senator JOHNSON. The reason I mention that acreage is that in the contract of the American International with the Shipping Board the American International states that it has an option for 846 acres, constituting two tracts, one of 440 and the other 406, I think.

Mr. BOHLEN. I think that is it.

Senator JOHNSON. Now, the option that existed up to February or March, 1917, was upon the entire tract?

Mr. BOHLEN. The identical land.

Senator JOHNSON. And the option was for $1,000 an acre?

Mr. BOHLEN. $1,000 an acre.

Senator JOHNSON. At what date were these first negotiations with anybody connected with the American International?

Mr. BOHLEN. In June.

Senator JOHNSON. Do you remember the individual?

Mr. BOHLEN. The individual was Mr. Stevens, the vice president, the man I saw in their offices, and a Mr. Connick was also called in, and one other gentleman whose name for the moment escapes me.

Senator JOHNSON. The suggestion that there would be $100 fee given for the execution of the option never was consummated?

Mr. BOHLEN. That was never consummated, so far as I know. The settlement was made on the basis of $2,000.

Senator JOHNSON. Do you know who it was that suggested that there should be a commission of $100 an acre?

Mr. BOHLEN. I have no idea. In fact, as I remember, that was not ntioned at the original conference I had. I then left the matter the hands of Mr. Black, who was in New York and was thrown in stant touch or was in easy access to these gentlemen. He sent to , as I remember it, the option with this figure in it, with the explaion that that was their commission.

Senator JOHNSON. Will you state to me the name of the title comy through which the transaction was consummated?

Mr. BOHLEN. The Real Estate Title & Trust Co., of Philadelphia.

Senator JOHNSON. Mr. Robbins is the executive?

Mr. BOHLEN. Mr. Robbins dealt with the whole matter. He was person we saw throughout. I may say there is at present about 00,000 now held under an agreement, not paid to the vendors, ich is the purchase price of the acreage which is the result of ing, there being some legal doubt as to whether the title to those lings goes to the owners of the land as accretions or whether the le to the fillings still remains in the State of Pennsylvania. Prodings are being taken to try that question.

Senator JOHNSON. Aside from the acreage price, do you remember e total price that was to be paid?

Mr. BOHLEN. Well, it was to be paid on the acreage, and I remember that the amount actually turned over was something in excess $1,600,000.

Senator JOHNSON. The price stated in the contract is $1,706,000. ere is very little difference between that and $2,000; $2,000 an re would be $1,692,000.

Mr. BOHLEN. There was perhaps an estimate of the acreage, corted by a subsequent survey, which we had made by Franklin & , of Philadelphia.

Senator JOHNSON. But the total price as you recall it was someere between $1,600,000 and $1,700,000?

Mr. BOHLEN. It was based upon the actual acreage to which the le company was convinced we had title and, as I remember it, s about $1,600,000.

Senator JOHNSON. Do you know whether the title company obned any appraisements by real estate men in Philadelphia?

Mr. BOHLEN. I do not.

Senator JOHNSON. What would be the object in obtaining such a ice in this particular transaction?

Mr. BOHLEN. I suppose is would be to test whether the price ich was asked was one which should be paid. Of course, the apaisement of property of this sort is difficult, because we have vays believed it is rather an exceptional location, but that is largely natter of taste and of need.

Senator JOHNSON. Was there any property adjoining your propy owned by somebody named Scott?

Mr. BOHLEN. Yes; there is a property owned by John Scott, jr., arge tract almost immediately below us.

Senator JOHNSON. Similar land?

Mr. BOHLEN. Similar to the land of the lower tract; not at all ilar, in my opinion, to the land in the upper tract. It had no ntage upon the channel.

Senator JOHNSON. Do you know what that was sold for?

Mr. BOHLEN. I have no idea.

Senator JOHNSON. In the past couple of years have any other options, except the one you have described that expired in February or March, existed upon that land?

Mr. BOHLEN. No option. We were in negotiation with the Westinghouse people some two or three years ago, and they offered $350,000 for 300 acres, with the intimation that if we would accept $400,000 the deal would be closed.

Senator JOHNSON. Neither to these gentlemen who suggested originally the $100 an acre commission nor to anybody else was any commission paid?

Mr. BOHLEN. Except our real-estate broker. We have not paid out one cent to anybody connected with the other side.

Senator JOHNSON. At the time of the signing of the documents, who represented the other side and was present?

Mr. BOHLEN. Mr. Connick was on—and the treasurer and the secretary of, I think—the International Corporation. It may have been the International Shipbuilding Corporation or the American International Shipbuilding Corporation; I regarded the two as substantially one. To tell the honest truth, I ought to have paid attention to it, but did not.

Senator JOHNSON. Did you and Mr. Black execute transfers at the same time?

Mr. BOHLEN. At the same time, in the office of the Real Estate Title & Insurance Co.

The CHAIRMAN. Do you know whether the lands lying north and west of this tract are improved?

Mr. BOHLEN. The land lying north is the Fort Mifflin property, owned by the Government. The land to the west, so far as I know, has not been improved. We regarded this land as of value for a manufacturing site or for a terminal proposition, or for a freight-in-bulk proposition, which it was Mr. Henson's desire to use it for.

Senator VARDAMAN. Before this sale this island was not occupied at all, was it?

Mr. BOHLEN. The island was not occupied at all. There was a house there in which we permitted one of the sons of the first holder of all to reside at a nominal rent, merely to have some one there to act as caretaker. There were two houses—Fred Black and a man named Dan Black. Dan Black lived there, and Fred Black had a house, although he had ceased to reside there.

The CHAIRMAN. The Pennsylvania Railroad runs to the edge of the tract?

Mr. BOHLEN. We granted a right of way to the Pennsylvania Railroad Co. on their assurance to complete it within a year through to our property, in the early spring of last year, just after the Chasson option had been terminated.

The CHAIRMAN. Have they still got that right of way?

Mr. BOHLEN. They still have that right of way, and the property was sold subject thereto.

The CHAIRMAN. That right of way extends clear through the tract?

Mr. BOHLEN. Clear through the tract. The tract, I understand, was to be finally looped up with the city over a bridge to be built in the near future.

The CHAIRMAN. What is the width of that right of way?

Mr. BOHLEN. Sixty-six feet, which they insisted upon.

Senator JOHNSON. At the time of the consummation of the transion did you execute an option or did you convey the title?
Mr. BOHLEN. In September, or the beginning of October, we con-ed the land outright.
Senator JOHNSON. But originally they had an option?
Mr. BOHLEN. They had an option for some three months.
Senator JOHNSON. Have you any interest in the land now?
Mr. BOHLEN. Not the slightest.
Senator JOHNSON. Or any interest in any proceeds to be derived m it?
Mr. BOHLEN. Except the purchase price that has been paid. That iausted all my interest in the land.
Senator JOHNSON. And you have retained no interest in rents, in ofits, or any other part of the transaction?
Mr. BOHLEN. In no way, shape, or form.
Senator JOHNSON. So far as you know, did Mr. Black part with his e absolutely?
Mr. BOHLEN. He parted with his title absolutely, as I understand. course I know nothing about the transaction which led to that e; I took no part in it. I was surprised that they desired the rest the island.
Senator JOHNSON. The first intimation came to you from whom?
Mr. BOHLEN. The first intimation came to me from a Mr. Steintz, of Philadelphia.
Senator JOHNSON. Who is he? A real estate man?
Mr. BOHLEN. No: he has been dealing in land—he owns some minal properties himself which he has just sold to the Pennsylnia Railroad. I do not know what his connection with the Intertional Corporation is or whether he has any.
The CHAIRMAN. He was apparently representing them, was he?
Mr. BOHLEN. He merely intimated they were interested, and took on to see them. At that time, as I say, he did not seem to know at Mr. Black had any interest in the matter. It was the first intiation I had that the Government or the International Corporation s interested in it. I had been given to understand it was useless offer it to the Government, as they had determined to build their rds in New York Harbor. I had discussed it with our agent, and had come to the conclusion that they intended to build their yards New York Harbor, and it was useless to offer it to them.
Senator JOHNSON. Who was your agent?
Mr. BOHLEN. William C. Claghorn, of 1218 Chestnut Street. I gret that I had to go out of town yesterday afternoon, and I did t receive the telegram which was sent me intimating that you uld be glad to have them come down as well. I do not think they uld add anything to what I say, but they said that they would be ad to come down if you desired them to.
The CHAIRMAN. So far as I know, we will not need them, unless nator Johnson wants them.
Senator JOHNSON. No; I do not care to have them come.
The CHAIRMAN. That is all. We thank you very much, Mr. hlen.
Mr. BOHLEN. I am much obliged to you for this opportunity of tting on record my connection with the affair.
(Thereupon, at 2.55 o'clock p. m., the committee adjourned, to et at 2 o'clock p. m., Monday, February 11, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

MONDAY, FEBRUARY 11, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

he committee met, pursuant to adjournment, at 2 o'clock p. m., he committee room, Capitol, Hon. Joseph E. Ransdell presiding.
resent: Senators Ransdell (acting chairman), Vardaman, Martin, son, Jones, Sherman, Harding, and Johnson.
enator RANSDELL. Senator Fletcher, the chairman, is ill to-day has asked me to preside.
r. Gompers, the president of the American Federation of Labor, resent, and unless the committee wishes to do otherwise we will Mr. Gompers first. Is there any objection to that?
r. Gompers, the committee is ready to hear you now.

TEMENT OF MR. SAMUEL GOMPERS, PRESIDENT AMERICAN FEDERATION OF LABOR.

enator RANSDELL (continuing). Mr. Gompers, we understood that would like to make a statement to-day before the committee, and would be glad to have you proceed in your own way.
ou are Mr. Samuel Gompers, I believe, the president of the erican Federation of Labor?
r. GOMPERS. Yes, sir.
enator RANSDELL. And your residence is in this city, is it?
r. GOMPERS. Actually; legally my residence is in New York City. headquarters of the American Federation of Labor are located in Washington, and my duties require me to be here most of time.
s a member also of the advisory commission of the Council of al Defense I am required to give some service here; and th dditional reason for my being so much in Washington.
enator RANSDELL. Will you proceed in your own way, Mr, to make whatever statement you would like to make b committee?
r. GOMPERS. Mr. Chairman and gentlemen, perhaps there l that would better fit the reason for my asking to be heard word "resentment"; resentment against the onstantly being cast by one person and anot eople of the United States. Our country a

our industries and our system of transportation have all, in a very brief period, been transposed from a peace footing to a war basis; and to imagine that all this wonderful change could have been accomplished without some mishap or some mistake or something falling down somewhere is expecting the impossible.

And I say this for everybody, without the exclusion of any group of people in the United States: First, in so far as labor is concerned, there is the haphazard claim of the shortage of labor, when any one who is fairly well acquainted with the conditions knows that there is no such thing in the United States, even at this time, as what is known as a shortage of labor.

What exists is a maladjustment of labor—the inability to utilize the men and the women as may be necessary and as are needed in the work and at the locations where they can find employment.

I am quite confident that I am within the limit of truth when I say that there are not less than 1,000,000, and perhaps a million and a half, of workmen in the United States now unemployed. And I will give one or two reasons or causes for their nonemployment other than what would in peace times be regarded as normal causes:

One is that the Government of the United States, for war needs, has practically stopped building construction—office buildings, apartment buildings, homes, in which iron, steel, or large quantities of wood—timber—enter. As a consequence of the priority claim of the Government for those materials, the construction of office buildings and large apartments has come to a standstill, and the workmen usually engaged in the construction of those buildings have been and are now unemployed.

There are fully 50 per cent—and my information is that the percentage exceeds 60—of the bricklayers in the United States who are unemployed. The painters, plasterers, lathers, and men in the incidental trades are unemployed.

Senator HARDING. Mr. Gompers, in passing, if it will not interrupt you—I do not desire to interrupt you—but I should like to ask this: Is that a condition incident to the winter season or was that true last fall, while the building trades could be employed?

Mr. GOMPERS. That is due entirely to the priority claims and demands of the Government of the United States in the iron, steel, and wood lines. The inclement weather and the severity of the winter would have had that effect, even in normal times, but this condition existed long before the winter began—months before.

Senator HARDING. What I was trying to get at was, that we have had described to us the diminution of the building trades, and I was just curious to know if the suspension in the building trades had been felt last fall, before winter came on, or whether it was due, in part, to weather conditions.

Mr. GOMPERS. It was due entirely to the war conditions and the needs of the Government, and was felt and existed before the season began.

In addition, there are thousands upon thousands in the needle trades who are unemployed.

Senator NELSON. In what trades?

Mr. GOMPERS. The needle trades; that is the garment-making trades. There are several

attributable. One is the greater economy exercised by women in the purchasing of ladies' wear, skirts, suits, cloaks, etc. Then, another reason is this—the comparative plainness of the dresses of women as compared to the more ornamental clothing that they wore in previous times. Then, there is the further reason that the Government has practically commandeered, or put its prior claim on, cloth—on all character of cloth to be used, or to be manufactured, of a particular pattern and weight, for Army uniforms—all of which has brought about a state of unemployment among the needleworkers, and particularly the needleworkers engaged in the manufacture of women's wear, so that in New York City and vicinity alone there are, and have been for four or five months, from thirty to forty thousand unemployed in those trades. And the conditions that exist in New York in regard to unemployment exist in nearly every industrial center of the country.

And there are others unemployed for other reasons. I do not want to go through the whole gamut in order to illustrate the point. What I have already stated will sufficiently illustrate the condition of which I am speaking.

The Department of Labor and the organizations of labor have cooperated together, so that there is now an agency in the department—and it is growing—by which, to use the vernacular expression of labor, the workman and the job may be brought together. And we are all in hopes that this will work, and we are confident that it will for all time remove this constant harping upon the alleged shortage of labor, when, as a matter of fact, it is nothing more or less than the maladjustment of labor, the inability to bring the work and the man together—at least up to this time.

In some of the trades there are being drawn, or some of the unskilled workmen are being drawn, into the establishments where they need additional help; and instead of it being true, as has been alleged, that the working people are increasing certain specific rules which may bring about a diminution of production by the workers, the fact is that the workers, in the organized capacity at least, have not only tendered their services but have put that tender into practical form—which is being used to a considerable extent, and, in addition to being used by the employers, is being used as an argument against the workers themselves—a state of facts to which I hope to call your attention before I have concluded.

I think I ought, at this juncture, to refer to some of the projects, or at least one of the projects, which have been proposed as a remedy for the so-called, or alleged, shortage of labor, and that is the bringing into this country of 50,000 or 100,000 or 200,000 Chinese workers.

Now, I say that that scheme, as it now appears before the public, has changed somewhat in so far as those who are standing sponsor for it are concerned. It is [illegible] year ago when the Chinese Six Companies [illegible] of about 2,000 words to Washington [illegible] I think, to the Council of National [illegible] to the advisory commission, and [illegible] tion and report.

Senator JONES. Mr. [illegible] you there? Who are those [illegible]

Mr. GOMPERS. The Chinese Six Companies are a corporation c Chinese and others who have taken under their wing the importatio of Chinese, either lawfully or unlawfully.

Senator JONES. Is it an organized company—is it incorporated, mean?

Mr. GOMPERS. I could not tell you, sir.

Senator VARDAMAN. Where are its headquarters?

Mr. GOMPERS. In California.

Senator JOHNSON. In San Francisco.

Mr. GOMPERS. Yes; in San Francisco.

Senator NELSON. Is it incorporated, Senator Johnson?

Senator JOHNSON. I really do not know. The Chinese are a empire within an empire, and there are various tongs for their Gov ernment, and then there are these companies, and these companie determine the various Chinese activities of all of the Chinese resi dents in this country, and those Chinese who did not come to thi country until they became thoroughly anglicized yield just as read an obedience to their tongs and to their companies—a much mor ready obedience, indeed—than they do to the Government itself. S that when the Six Companies wired, as Mr. Gompers has stated, the acted for the Chinese generally.

Senator VARDAMAN. What do you call it?

Senator JOHNSON. This particular organization is called th "Chinese Six Companies."

Senator VARDAMAN. Well, I mean the tongs.

Senator JOHNSON. Well, the tongs are a different sort of organi zation, in which they decree life and death as well.

Senator VARDAMAN. They do not do that here, do they? They d not do that in California, do they?

Senator JOHNSON. Yes.

Mr. GOMPERS. Wherever the interest of the Chinese Six Companie warrants it their jurisdiction is international, and their activities ar just as extensive.

Senator HARDING. It reaches from coast to coast, does it not?

Senator JOHNSON. Yes.

Mr. GOMPERS. The tongs, I may say—and I think Senator Johnso will agree with me as to that—are secret orders, each of whic determines its relation to its members as well as to the other tongs o secret orders, and also the relations between the employers and th Chinese and their relations with other peoples and with the Govern ment of the United States, and the feuds existing between the differ ent tongs in the past have been of such an intense character that th killing of certain individuals, or officers, or representatives of tong has been a matter of common procedure in California and at leas other cities on the Pacific coast.

Senator RANSDELL. Do you know whether those Six Companie have an official recognition from the Chinese Government?

Mr. GOMPERS. I do not know, sir. But they are very rich an powerful, and they exact tribute and collect it in advance fro every Chinaman who lands within the United States, whether withi the law or in violation of law. And in discussing this feature i may not be amiss for me to call attention to the fact that under th régime and the practice as they have been, the Chinamen who ar

in the United States in full conformity to the provisions of law are held just as much under the power of these companies as any others. So that it is not difficult on their part to manipulate things so that the man who is lawfully here in the United States may be charged with being in the United States in violation of law; and hence it is necessary for him to make his peace with those companies.

Senator RANSDELL. Will you tell the committee the significance of the term "Six Companies"? Is it really one organization, or is it six organizations altogether?

Mr. GOMPERS. I can not give you the authentic information upon that point; I can only give you the information as it has come to me, and that is that they were different companies, and that they merged into one company called the Chinese Six Companies.

Now, after that open offer from the Six Companies there came the same character of offers and propositions from different sources, and nearly all of them would send some sort of a representative to me to get my consent or my approval of the scheme, etc. I do not know that that is quite essential, of course; but they wanted to inveigle me into giving my approval of it.

The only thing I can say is that I, with my associates, believe that such a proposition is dangerous in the extreme. We have enough of a race problem in the United States to meet and to solve; and we have not solved it, and we are not solving it; and it is [illegible] with us. And how it would be possible to solve it if there were to be two or three or five millions of Chinese come to the United States [illegible] would solve that problem in that case is something to make us pause.

We have seen where the Chinamen went; they have [illegible] We have seen where the Japanese went; and they [illegible] There are about 300,000 people in Hawaii; there are now, I am [illegible] informed, over 125,000 Japanese there, and they are [illegible] And then, in addition to all that, there is the [illegible] the period while they are here, if [illegible] should come here, that there would be a great [illegible] among the American [illegible] among them.

Senator VARDAMAN. [illegible] sion would be granted by [illegible] country?

Mr. GOMPERS. [illegible] Representatives pass an amendment [illegible] is contained in the amendment of Mr. [illegible] committee reports such a proposition [illegible] what lengths the Congress of the [illegible] pelled to go.

Senator VARDAMAN. [illegible] and cents, while [illegible] try—threatens the [illegible] necessarily result in the [illegible] tion of our civilization. [illegible] as to favor anything that would [illegible]

Mr. GOMPERS. I am [illegible] know that many years ago [illegible] of the United States [illegible]

collies—to come to the United States. And what has been done in the past is likely to be done again unless attention is called to it and protest against it is made.

Senator VARDAMAN. I agree with you that anything is liable to happen now.

Senator HARDING. Had you finished on that subject, Mr. Gompers? I wanted to ask a question if you had finished on that. I have assumed from such discussion as I have heard that this proposition has applied only to farm labor. I would like to get the viewpoint of labor as to a method of obtaining relief for the acute situation of labor on the farms. Would you mind giving that to the committee?

Mr. GOMPERS. I will do so as best I can. Last year, when there was published broadcast the demand for labor on the farms, during the gathering of the——

Senator HARDING (interposing). Harvest.

Mr. GOMPERS. Harvest, the farmers were supplied with men, especially young men; and upon inquiry of the Department of Labor, having the matter of supplying workmen in charge, the answer came back that there had not been any request for labor of any kind that the department was unable to fulfill.

The Government of the United States has set a price for wheat of $2.20; that is far above any price which has been placed at any time on it, even by the farmers themselves. Now, I do not want to have the appearance of being in opposition to the farmers in getting the very best that they can secure; on the contrary, I am with the farmers in their efforts to secure a substantial return for their service to society.

I have not the slightest doubt that we shall be enabled to meet the demand necessary to supply labor to cultivate and reap the harvests upon our farms.

Senator RANSDELL. Mr. Gompers, I was at a meeting three or four days ago where a number of farmers spoke, and they said that the situation was very critical just at this time, and, among other things, this statement was made: That in the State of New York at this time there are over $4,000,000 worth of farm products in the fields—now in the ground—that could not be gathered owing to the shortage of labor. They described the making desperate efforts—every possible and every imaginable effort to supply the deficiency of labor.

I know nothing whatever personally about the accuracy of those statements; but those farmers came here from almost every part of the United States, they claimed to represent 31 States, and they said that labor was very short on the farms, and they were predicting terrible conditions among the American people this year owing to that shortage of labor to harvest the crops.

Mr. GOMPERS. Speaking of the farmer as a farmer and the service he performs for society, he is probably a little different in his attitude from that he takes as an employer of labor. As a matter of fact he is not very much better as an employer of labor than the employers in industry, and they would like very much to have a surplus army of unemployed from whom they can draw at any time, for any wage, and to work at any old start so long as they can get them. In his attitude as a farmer I am in entire sympathy with

m. but with his attitude as an employer of labor I think we are ry much at variance.

Senator RANSDELL. Well, the speakers at that meeting to which I fer claim to be farmers themselves. Several of them said that ey were men who owned farms and their boys have been drafted to the Army, that they were too old to work the farms themlves and they could not get anybody to take their farms and work em. I do not know whether they were stating the situation cor ctly or not. In my own State of Louisiana, so far as I know, there plenty of labor just at this time. If I were put on the witness and, I would say that we have all the farm labor that we need down nere in that immediate section. But these men were here represent ng a number of States, and they made those statements at this ast meeting in this city.

Senator NELSON. Your labor down there in Louisiana is all col ored labor, is it not?

Senator RANSDELL. Yes: where I live it is, but we have a great many white people engaged in farming in Louisiana. I believe there were no Louisianians at that meeting, and I have not heard of any shortage of farm labor in my own State. But this seemed to be a fairly representative gathering at that meeting: there were men there from various sections of the South, as well as men from Ohio, New York, New England, and various other parts of the Union.

Senator HARDING. What I was trying to bring out, Mr. Gompers, was this: While it may be true that there has been no application by a great number of farmers to the Department of Labor, the members of the Senate from States throughout the North are receiving appeals after appeals for some relief from the [illegible] farms: and in many cases there is the implied [illegible] that without some assurance of relief, the planting will not [illegible] Well, I have little patience with that.

But what I want to get at, Mr. Gompers, is that [illegible] there is an abundance of labor. How [illegible] portion of it, for the American farm [illegible] to answer those inquiries?

Mr. GOMPERS. In the State of New York [illegible] ner mentioned—there is a system of employment agencies [illegible] or industry, agriculture, and transportation.

The reports of that employment agency show [illegible] ave been filled. Of course, on the farms [illegible] it if the farmers will present [illegible] ployment agencies, and the demands [illegible] Of course, the question arises, now [illegible] time to take [illegible]

But until it has been [illegible] lled, it is simply [illegible] ie question in a general way [illegible] umbers of men and women who are [illegible] ade available, and we want to [illegible] ny occupation.

Senator SHERMAN. Mr. Gompers, [illegible] ntatives of the farmers [illegible]

The State lies adjacent to New York City. The farmers almost unanimously said that they approached the State labor agencies and the Government at Washington in the matter, and in response to their requests the records will show that both of the State and of the Federal authorities—that their demands or requests for labor were filled; but without an exception, the farmers said that the men after they had reached the farms, manifested one of two tendencies—either they did not know how to work, or they did not want to work.

The records of that are kept, Mr. Gompers; it was at a meeting held at Trenton, N. J., the 23d of January, 1918, as I remember the date. The farmers, without exception, whom I heard report on the situation at that meeting, said that last year, during the harvest season, of the men that were sent in response to their requests, some would not work. One farmer that I recall particularly reported that four men, who came there, worked all the way from half an hour, the shortest time, to about a month, the longest time; that they would not get up in the mornings; that they would not do chores; that they would not obey any directions for the care of stock and the like, and that some of them were drunken; some manifested no disposition to want to learn anything; and that generally, in response to their requests, the character of men sent to them, as to their disposition to work or their knowledge of how to do work, was so unsatisfactory that they had given up the plan entirely.

Senator RANSDELL. May I just say one other thing before you answer that, Mr. Gompers? At this meeting that I attended I remember distinctly that a very intelligent man from Herkimer County, N. Y., made the statement that he, and I think he said also the director of agriculture of that State, had united in carrying up to the central portion of the State at one time 4,000 laborers from New York City to assist them in carrying on their farm work; and they had to pay a good deal of money to get them there; and he said that every last one of them, except one, left within 24 hours after they got there; only one stayed.

Senator SHERMAN. In the case that I spoke of, the farmer said that the laborer who stayed there a month cost the farmer $75 in cash, and that his work was practically worthless the whole of the time.

Of course, these are not the conditions that I want to find; but the records will show that those men were sent out, but the records do not show the practical results of the effort; and I want to know some way of bridging that practical difficulty and of getting somebody to do farm work after they get out on the farm.

Mr. GOMPERS. Now, may I say this? I think we all know that there has been considerable extension of farming activity in the last year.

Senator SHERMAN. Yes.

Mr. GOMPERS. The reports which have reached me show that farmers either made little effort, or that there were no facilities to find even decent housing conditions or homes for the men whom they brought to their farms; that men were given the coarsest food, in addition, and that created a great deal of discontent and inability to work by reason of having no housing.

The same thing applies, in large part, to industry. A few months ago an advertisement appeared in a Newark, N. J., newspaper,

ıying: "Wanted, any number of carpenters to work in Baltimore; nion wages and union hours guaranteed; work guaranteed."

Two men were at a certain place to receive applicants, and within ł hours 800 carpenters appeared at the rendezvous. They paid $2 piece for the purpose of enrolling themselves in that contingent of ırpenters to go to Baltimore. They were put on a train, and when ıey reached Baltimore there was not a job to be found for any one : them.

Now, those two men that engaged them were arrested and punhed—at least they were threatened with punishment. But I only ıention this one instance to show that, at first, even among the carenters who were then largely employed upon the cantonment work, 00 of them in a single city enrolled within 24 hours, and gave $2 or the purpose of finding a job.

It is a common practice that is even now in vogue that men are dvertised for and go to places to find work, and when they get there, n nearly every instance they find no work for them to do, and are ying around there idle; in some instances they are unable to get ıack to where they came from, and for those who do find work there are no places to sleep—no places for them to get shelter.

Senator SHERMAN. Do you think that applies to farm labor, Mr. Gompers?

Mr. GOMPERS. Probably not to that same extent, but the condition does exist; and I have called attention to the fact that reports were made to me of that state of affairs.

About seven months ago I brought to the attention of the advisory commission the question of housing workmen in the industrial plants engaged in war work. The commission brought it to the attention of the Council of National Defense. The matter was referred to my committee on labor, including the conservation and welfare of the workers.

I appointed a gentleman by the name of Hiss, an expert on the subject of housing; he is a builder and an architect and a man of broad vision and practical understanding. He made an extensive and intensive study and survey of the subject and made a report which showed the actual conditions as they existed.

I brought that to the attention of the commission. The commission had a four-days' hearing of experts, of builders, of architects, of presidents of companies, superintendents and foremen, etc., all of them showing the awful conditions which prevailed owing to the lack of housing facilities for workmen.

The matter was brought to the attention of the Council of National Defense, and with the approval of the President a committee was appointed; the largest and the most practical builder in America was made chairman of a committee to make an investigation. An investigation was made and a report was submitted within 10 days giving all of the data, all of the information which had been collected and all which they could collect, and setting forth not only the problem but the solution of the problem, and up to this moment Congress has not acted.

Senator NELSON. Yes; we have acted, so far as the shipbuilding program is concerned. We passed a bill some days ago providing for housing shipbuilding employees, and before that bill was passed

the Shipping Board had already taken steps toward meeting that situation.

Senator JOHNSON. Yes; but the bill is pending in the House; it has not yet been passed by the House.

Senator SHERMAN. The housing conditions have been very bad in many places, in industrial lines, no doubt.

Mr. GOMPERS. So far—up to this very minute—not a house has been built in which the men can work and sleep and rest.

Senator HARDING. Well, you are aware, Mr. Gompers, are you not, that in two yards the building program is already under way, even without the passage of the pending bill?

Mr. GOMPERS. That was done without authority of law. The project of building houses for the convenience, for the shelter, and for the rest of the workmen—that does not exist. Even in the case of those two, where you say they are in course of construction, they are not now habitable.

Senator HARDING. I quite agree with you. I only cited that case to show you that this committee has responded to the needs of the situation, and that the necessary law to meet that situation has been enacted, at least so far as the Senate is concerned.

Mr. GOMPERS. I am not finding fault with the Congress of the United States, or with any member of Congress. I am merely trying to place before you gentlemen the conditions which exist and to support what I stated in the beginning was the reason for the resentment which we feel against being made the "goat" for whatever failure there may be in fulfilling the war program. You gentlemen and I——

Senator JOHNSON (interposing). I do not want to interrupt you, but I was going to say that you are absolutely correct, so far as the housing program is concerned. There has been absolutely no vision in anybody connected with the administration concerning the execution or the consummation of that program, until this committee, by its investigation, developed the subject, and then proceeded, individually and collectively, to carry out the particular plan which you suggest.

Senator JONES. Let me ask you this question in that connection. Mr. Gompers: Did the Council of National Defense report or make any recommendation to Congress, or did any one who was connected with that investigation submit any report to Congress, or suggestion, as to what ought to be done? I will say that I have not heard of any such report or suggestion myself.

Mr. GOMPERS. I can not say. I do know this, that the council and the commission felt very keenly that something ought to be done. We thought that the council and the commission, either or both, did not have the power to do anything——

Senator JONES (interposing). Then they should have suggested to Congress the needs and the necessity for having the power to do something, and what ought to be done; and I think that Congress would then have acted, and this committee would have acted.

Mr. GOMPERS. I hold no brief for the council or the commission, but I want to lay before you this fact: That you gentlemen and I have been suffering inconveniences and making sacrifices because of the war. But we have places—good, bad, and indifferent—in

hich we can lay down our heads and get some rest, if we have the ›portunity of getting it. But those men are workmen who are ›awn from one place to another, to a central point, and they go ere and go to work, and then they are put in stables, in garages, ıd for some of them there are not places at all. Now, those men n do that for a night or two, but they can not continue to do that d work.

Senator VARDAMAN. Did your committee, Mr. Gompers, or this mmittee of the Council of National Defense, report to the Presiıt, or to the Secretary of War, or to any other person in auority?

Mr. GOMPERS. It was reported to the Council of National Defense, ıd to the President, and to the advisory commission.

Senator VARDAMAN. I do not think it has ever been received by ›ngress.

Mr. GOMPERS. Gentlemen, I would rather that you do not put me the position of the critic, or the defender of anybody. I want mply to lay before you the facts as they are, and show you the ıuses for the conditions which exist and I am, if you will permit me › say so, the spokesman for these men. And not only are they made › suffer, but my associates and I are made to suffer, in the eyes of ıe people of the United States, through criticism that is wholly unustified. I want to present the conditions here.

Senator VARDAMAN. Well, the answer to that is the information hich your committee gathered had not been given to the public, so ır as we know.

Mr. GOMPERS. Senator Vardaman, those facts were submitted to he public through the press, and through pamphlets and through irculars.

Senator VARDAMAN. But I want to ask you this question: Do you ind that the man who is reared in the city, and who has never had ıny experience in farm work, is a very helpful sort of a person on he farm?

Mr. GOMPERS. I must confess that I have too little knowledge of farming, having been a city lad and lived in the city all my life, to feel myself competent to answer that question intelligently.

Senator HARDING. Well, is it not a fact that the whole manifestaion is against going to the farm from the city?

Mr. GOMPERS. I think that is true, sir.

Senator HARDING. Now, may I ask you this question, which is periıent to the situation that you are setting forth: Assuming all that you say about the housing situation, which we have sought to remedy, hat is the remedy for the workman who is transported from one › lace to another, and then finds no job? Is it the employment gency, or is it some Government function? What ought to be done o save the laboring man from being carted back and forth and disppointed when he goes to a place expecting to find work?

Mr. GOMPERS. Senator Harding, if you will permit me to defer ıe answer to that question until I have presented two or three other oints that I wish to present, I would like to do so.

Senator HARDING. Well, I would like to have you answer that beıe you finish, because I think it is a vital question.

Mr. GOMPERS. I shall try to do the best I can.

Senator HARDING. I want you to understand in passing, Mr. Go pers, that these questions are not proposed to you for the purpose purturbing or annoying you. We are merely trying to get inform tion from one who knows about these things.

Mr. GOMPERS. Let me assure you, sir, that I am not perturb The men who go to such places where they are wanted, and then fi that they can not get any places of rest, and can not have the opp tunity of recuperation—they can not work; they will not stay the they simply go away—leave. And those who remain must necessari have their efficiency reduced just to that extent, by the lack of prop housing.

In addition to that there is this fact, that the new institutions th have grown up and been created in this past year, are frequent located a ride of an hour or an hour and a half on the street cars the trains from where the men are living, in some of the cities. Th in addition to the 9 or 10 hours a day, and sometimes more, th they are working, it takes them an hour or an hour and a half to g to their work, and the same length of time to get back to their plac of abode. There is one city—take for instance the shipyard at Sa Pedro, the men live in Los Angeles, and it is a ride of fully an hou and a half or two hours for them to get to work, and the same lengt of time for them to get back.

Senator NELSON. That is from Los Angeles, is it not?

Mr. GOMPERS. Yes, sir. And many of the men working on th evening shifts, coming home into the city of Los Angeles at nig find that the street cars have stopped, and they have probably a mi or 2 miles or more to walk from the railroad station to their home

In Philadelphia, the same conditions exist in connection with th shipyard there. The ferry boats are jammed. A friend of min Mr. Alfred Berres, a member of the wage-adjustment board of th Shipping Board Emergency Fleet Corporation told me that h saw a photograph of a street car with a trailer, and the men we hanging on to the car, holding themselves with one hand on the ca with men standing and sitting and some lying down on the street ca going from their work to their homes and from their homes to the work.

Senator NELSON. Mr. Gompers, that very condition exists in th city. You take it between the hours of 8 and 9 o'clock in the mor ing, and between the hours of 5 and 6 in the evening, and you ca hardly get standing room on the cars.

Mr. GOMPERS. Yes, sir. That is in Washington, where the cha acter of the work is clerical; and there in those places to which have alluded the work is manual; and how men can give a good day work of that kind under such conditions is beyond me—well, it impossible.

Then, in addition, during the severity of this weather—of cour that does not apply so much out in California, but in other cities the country, where the terrible cold has prevailed, we know that th pneumatic tools used for the riveting are capable of performing le than 50 per cent of their normal work. All of us have heard that locomotive engine will not be able to exert its great driving or pullin force in severely cold weather. But there are a few men who hav lodged complaints, and before the public, who will not take into co

sideration the fact that the pressure and the efficiency is lessened in the same way when it comes to be applied to manual labor.

Then, again, the various methods of payment of workers, some by the piece, some by the hour, some by the day, and some by the lump or contract price, has a bad effect: the variation breeds discontent. Secondly, the men who have given the full measure of their physical and mental ability to produce when they are engaged in piecework have had their piece price reduced so that their earning power was reduced in the same proportion that they increased their productiveness.

Senator HARDING. Now, Mr. Gompers, that is a vital question here. Is it or is it not a fact that the Government mediation boards have stepped in and guaranteed the men against any reduction of piece-price pay?

Mr. GOMPERS. Yes, sir.

Senator HARDING. If it is inconvenient now, you may insert that in the record when you revise your testimony.

Mr. GOMPERS (examining papers). Mr. Tom Barker, of Los Angeles, Cal., Secretary of the Los Angeles County Building Trades Council, made that statement to me: I have it here with me, if you do not mind my reading it.

Senator HARDING. Not at all.

Mr. GOMPERS. This paper from which I am reading is dated Washington, D. C., February 8, 1918; it is a memorandum of a conference between myself and Mr. Tom Barker, and is as follows [reading]:

MEMORANDUM OF CONFERENCE BETWEEN MR. GOMPERS AND MR. TOM BARKER, SECRETARY OF THE LOS ANGELES COUNTY BUILDING TRADES COUNCIL.

WASHINGTON, D. C., *February 8, 1918.*

Mr. BARKER: The Los Angeles Shipbuilding and Dry Dock Co. was organized about 10 months ago. Among the directors were a son-in-law of the late Harrison Grey Otis, Harry Chandler; Fred L. Baker, who is the president of the company; Mr. William A. Hollingsworth, a big real estate man, and a Mr. Napthali. They organized this company and secured contracts for about 12 steel vessels. We endeavored to secure an understanding with this company to work in harmony with them. We did not succeed. They have at the present time about 4,800 men working there. The yard is located at San Pedro, about 25 miles from Los Angeles. San Pedro is part of the city, being annexed by vote of the people seven or eight years ago.

There are not sufficient housing accommodations in San Pedro for the men working in the yards, and the cheapest rate of car fare they can get is purchasing a book of tickets for about 27 cents a day, in addition to the 10 cent car fare for the city street cars, or about 35 or 37 cents per day. The attitude of the company is hostile to organized labor and they are only employing union men because of the demand for men, particularly practical men.

A month or six weeks ago we saw a demand in the Los Angeles Daily Times and the Daily Tribune, which ran something like this: Wanted, men to work in the shipyards: carpenters, shipwrights, ship fitters, etc. Apply at a certain post-office box.

Shortly after that one of the members of the machinists' union in Los Angeles came to us and told us he had applied for work as a machinist at the office of the Los Angeles Shipbuilding Co. and was informed that they were not in need of machinists. This man had references from previous employers, all commending him for his ability as a mechanic. On his way back to the city he was accosted by a representative of the William I. Hollingsworth Real Estate Co. who told him he could secure employment for him. He was then taken to the office of this company and upon signing a contract to purchase a lot of the value of $800, upon which he made a deposit of $25, with a further pr

to pay $25 per month until he had paid the sum of $200 on his principal, he was given a card address to the same man at the office of the Los Angeles Shipbuilding & Dry Dock Co. who had previously told him they were not hiring machinists, and upon presentation of that card he was immediately employed. This man is named Amos. Documentary evidence to support this statement has been submitted to Mr. Blackman, member of the wage-adjustment board, connected with the Emergency Fleet Corporation.

Recently this company has attempted to adopt a two-shift plan. The railroad facilities are such that men working on the night shift are run into Los Angeles at a time when the local street cars have ceased running for the night, many of them having to walk several miles from the railroad depot to their homes each night. All attempts on our part to remedy the just grievances of the men in regard to hours and general working conditions have been unsuccessful.

We have submitted to the wage adjustment board documentary evidence in the handwriting of the men involved in the different branches of trade in this yard, proving conclusively that this company is refusing to abide by the wage award made by the wage adjustment board.

There is one more instance where Mr Everett, the yard superintendent, requested me to secure a number of competent shipwrights, claiming that the men employed in that work were not competent. Upon his promise that the men would be reimbursed for their railroad expense I secured five competent shipwrights from the city of San Francisco. The general manager of the yard, Mr. Gardner, informed one of these men that if it had not been for them it would have been impossible for them to have launched their first vessel at the time stipulated. When these men made application for their railroad fare, they were refused, and to date said fare has not been paid.

This company received a communication from Mr. Everet Macy, chairman of the wage-adjustment board, dealing with the employment of house carpenters on ship construction, providing for a period of three months during which they were to receive the standard rate of wages prevailing among house carpenters in that locality. Upon receipt of this communication a communication was issued to the effect that no more men were to be hired at the wage of $6 per day, which had been provided as the wage to be paid to shipwrights by the wage-adjustment board.

There are other details, but I think that is sufficient.

The wage-adjustment board referred to in that memorandum is the wage-adjustment board of the Shipping Board Emergency Fleet Corporation.

Now, that is just an ordinary statement from a man who came here for an entirely different purpose. In other words, the purpose for which he came here was to join with other men in going throughout the country and conducting a campaign for loyalty among all the people of our country; and he came here for a conference which was to establish a kind of understanding by which the general points which each of those speakers were to bring out were to be arranged and it was a mere incident of that visit here that he communicated this information to me.

Senator HARDING. Well, we were discussing piecework compensation. The memorandum that you have just read does not recite violation of any piecework contract price.

Mr. GOMPERS. I think I have had that information communicated to me. But I think I could do better upon this point, and the gentlemen of this committee could do better, by [illegible] statement regarding the shipyard conditions, and [illegible] apply to labor, presented to you by [illegible] the Brotherhood of Boilermakers, [illegible] whose jurisdiction this character [illegible] Norfolk, Va., who has practical [illegible] Scott, from the Philadelphia shipy[illegible]

Senator RANSDELL. Those gentlemen are they?

ɔompers. They are here ready to testify.

ɔor Harding. May I ask you this question at this point: Is ɔstility on the part of labor organizations to the piecework n?

ɔompers. There was. There is to this extent: That the policy n, on the part of the employers, when any piecework was to ormed, to bring in or to call upon the most competent, the st, the most robust, and energetic man and put him upon that ɔ and test him out and then pay the rates based on that to ı who could never hope to equal the productivity of this more stronger man. Then, when the employers have put an incen- ɔn workers to work harder and produce more, the policy gen- ɔursued was to reduce the price per piece, so that their greater netted them just about what they earned before they had put ɪeir greatest energies.

nmittee, or rather a delegation of workmen sent to the United ɔy Lloyd George, of Great Britain, arrived here last spring; egation included Mr. Charles Bowerman, a member of Par- , and Mr. James Thomas, another member of Parliament, ɛtive labor men in England; and they made this statement: ıe Government has set down as an order that when a price had t for piecework, no matter how much the earnings of workers ıe price per piece was not to be reduced; that the employer, or vernment, were to be the beneficiaries of the greater produc- nd the mere fact that men earned more by reason of giving full nd swing to their strength and energy was no reason to reduce arning power.

tor Nelson. But, Mr. Gompers, in connection with that state- that would imply that you could expedite the work more by ork than you could by day work. Your statement is made ly that?

Gompers. I have not any doubt of that—but for a briefer of time. If you are to get the most out of a man in the shortest e time, you can work him at top speed for about 24 or 48 hours ıously. But then you have killed him so far as his productiv- ɛncerned. If you expect the continuity of output in produc- ɔu will have to give him an opportunity to live and to work he will continue to produce day after day to the fullest extent ɔowers.

is not anybody but the worker who is expected to give con- y to the fullest extent his energies and his powers. No ects that a great sprinter going at the pace of the 100-yard keep that up for a 5-mile race or a 24-hour race; nor would ct a pitcher in baseball to work three or four games a day, ay in a week, or a whole season. You would soon break that rate. And that applies equally to the men who work. t of the matter is that the working people of the world present time, be regarded as mere automatons, are human has not been con-

ompers, that a work- tionally expend his

Mr. GOMPERS. Yes, sir. And I say that as a pieceworker of years' factory experience.

Senator HARDING. Well, what is the explanation of that? He c trols his own activities, does he not?

Mr. GOMPERS. He does not. He is impelled on by the swif and the strongest, and if he does not keep up the pace, he has to m way for someone else. In normal times, at least, he must make pl for someone who can come up to the mark; it is not a question of average, but it is a question of coming up to the highest productiv

Senator HARDING. Well, perhaps this question is academic: bu it is a fixed matter that the compensation is not to be altered in cordance with the production, and that the wage earner and employer and everybody profits by the increased activity, what centive, or what impelling force, would drive a man on to cri himself under those conditions? What would take it out of his control? I would like to get at that, because that is a question t has been much discussed before this committee.

Mr. GOMPERS. I think it is something not yet generally un stood what workers will do in order to meet the needs of the ho hold. Men who are physically comparatively weak force every ou of energy that they have left in order to get something for tl families, particularly if they have been suffering under some co tions of distress—men who ought to be in sanitariums for tube losis, and so on, are at work and working hard: men who, if they three months' or six months' time for recuperation, could be r valuable members of society, and yet who must work, and con to work, and kill themselves within a year. While the grass g the——

Senator HARDING (interposing) Well, that ought not to be

Mr. GOMPERS. Well, it is. Of course it ought not to be: bu And when I say this, I do not want to place myself directly indirection in a position where I am not willing that the men do their very level best, especially in this critical hour of the life. Men should be, and will be, willing to work at top But when they do that, it ought not to work to their disadv and that not only during the war, but after the war is closed. men exert themselves to the fullest extent in producing the to be assured that it is not going to work to their disadvanta in giving their energy and their life for six months, or a during the war, that they are not going to suffer by it: but th the war ends, I may be dead, and others may be dead, but t mass of the people are going to live, and that that herita to be handed down to those who are going to liv over, when we are gone. That is the thin tion——

Senator NELSON (interposing). I t

workers ought to have good li

worker

GOMPERS. Among a very few it still exists; but it is due pri- to the causes that I have mentioned. And it is regrettable is true. But it is a result, not a cause. The cause is what just pointed out to you, that if the men put forth all their s and produce the full limit of their ability, the whole ex- e has been that they will be cut in their price per piece; and y, "Well, if that is so——"

tor VARDAMAN (interposing). Is that being done now?

GOMPERS. I have been informed quite recently that, in an in- or two, that still exists.

tor VARDAMAN. Well, I agree with you that it ought not to

GOMPERS. It ought not to exist.

tor VARDAMAN. No; it ought not.

GOMPERS. But it exists, as I say; so that that opposition, when s, is a result and not a cause of this situation.

tor VARDAMAN. Well, may I ask you just at this point if that hall be removed in this emergency, do you not think that the g people of this country will respond with energy and iasm to meet the demands of the hour?

GOMPERS. Senator, the fact——

ator HARDING (interposing). Pardon me just a moment, Mr. ers. I think you misapprehended Senator Vardaman's ques- You asked about the existence of the revised piecework rate, u not, Senator Vardaman?

ator VARDAMAN. I asked if there was any disposition to cut the pay of the men who worked by the piece.

ator Harding. I thought Mr. Gompers misunderstood that. Mr. Gompers, is it not a fact that the Government mediators given a guarantee in all shipyards that that shall not be done?

. GOMPERS. They have established a wage, but it varies in the us shipyards throughout the country. And while it may not be able, yet it is a fact that there is considerable dissatisfaction. instance, a man doing a like character of work, say, in Phila- hia, or in New York, or in Maryland, shall receive a lower wage that set as the wages in California, and in Seattle, and Port- and other places. That is creating considerable dissatisfaction.

nator HARDING. Do you think there is a reason for difference in age scale between the East and the West coast?

. GOMPERS. I think not, sir; not for the same character of work.

ator HARDING. Well, has that not always been done in times of ?

GOMPERS. Yes, sir.

ator HARDING. Was it due to the better organization of the coast or difference in the cost of living there?

GOMPERS. Organization.

ator HARDING. Now, do you believe that the standardization of throughout the shipbuilding industry of the country would conflicts and disputes t at are delaying the program?

not know that it is desirable;

v to——

h. You said "delay- the workmen are

[illegible]

[illegible]

[illegible]

ator HARDING. That is rather a serious indictment on Gov-
nt control.
GOMPERS. And the world gives me credit with having wonder-
wers and influence. I am not growling; we are in the war, and
willing to give my share and suffer my share and sacrifice my

ator NELSON. You could not feel that that was helping the
t was helping the fellow who was selling the coal.
GOMPERS. Yes. The story comes to me of the Englishman who
it in stocks and who was being flogged. His attorney came to
nd the man told him of his sufferings. "They can not do this
. They can not put you in stocks and can not flog you." "I
they can not, but they are doing it." [Laughter.]
ator HARDING. Recognizing the crux of your statement, it is
an indictment of our endeavors to control that situation, be-
we have every reason to believe that the producer of coal got a
price and the transportation agent by rail got a fixed price, and
sumed that the man who delivered it from the rail to you gets a
price.
GOMPERS. Dr. Garfield told me, in conference with him upon
other matters, when incidentally I mentioned this fact, that I
id $14.56 for the ton of coal to be dumped in front of the house.
' can not do that. The rate is established for delivery at $10.20,
aximum." I said, "Yes; they can not do it; but they have
t."
ator VARDAMAN. Your experience in that is common with man-
enerally here.
GOMPERS. And I was told by a man in whose veracity I place
te confidence—and I will produce the man who told me, if de-
-that there was one of the wealthy men in the city of Washing-
front of whose residence he saw 10 tons of coal placed within
st week. I will give you his name, but I do not want it to go
e record.
ator VARDAMAN. I think it would be a good idea to have it go
newspapers. That is the way to correct these things.
GOMPERS. That is very funny, when you know it was one of
wspapermen to whom it was delivered.
ator VARDAMAN. I think you better give his name and let the
y know it.
ator HARDING. It ought to go to the Fuel Administration. It
ifestly a violation of the regulations.
ator NELSON. It is a repetition of the old adage, "What is the
ong friends?"
GOMPERS. I would like to say something in regard to the posi-
labor, but before I do, while we are discussing the question
d earnings and cost of living, and so on—which is too
for even you gentlemen to act upon at this time—
occasion to refer to what has become known as
ent. The amendment, which has now passed the
en reported favorably by the Senate com-
es for the increase of the hours of labor
nment in Washington from seven to

eight, as a minimum. The existing law is that the Government em ployees work seven hours a day, but may be called upon at any tim to work longer hours, no matter how long, and that they do nc receive any compensation for those increased hours which they ma be required to work by their superior officers; they may be calle upon to work upon Sundays, for which they also do not receive con pensation. If that amendment should become part of the law, simply means that a minimum of eight hours—not a maximum eight hours—must be worked by these employees. The Federal er ployees in Washington talk with me quite frankly, though probab they would not feel they talked as freely as they would like to—b they feel a rank injustice is about to be imposed upon them. In a other governmental employment the law is and the practice is th eight hours shall constitute a day's work, and that they shall not l required to work, except in an emergency or in a state of war, ar that then they shall be paid for not less than time and a half. He is proposed an amendment which is to increase the hours of lab to eight as a minimum.

Senator NELSON. But you must not overlook, Mr. Gompers—I c not want to interrupt you.

Mr. GOMPERS. It is no interruption.

Senator NELSON (continuing). That these Government employe get 30 days' leave every year on full pay and 30 days' sick leave c full pay

Mr. GOMPERS. And work any time that their work is required witl out extra compensation. There is this fact, they feel that the Go ernment to-day, and particularly at this time, is striking a blow : them

Senator NELSON. Would it not be better to raise their wages ar make them work eight hours?

Mr. GOMPERS. Senator, they can now be required to work 8 hou or 10 hours or 20 hours, to perform Sunday work or holiday work [illegible] and they do not get any extra compensation. Where the necessity then of specifying——

Senator NELSON (interposing). The town is swarming with pe ple. If you go into departments and Government buildings y [illegible] young men and young women standi [illegible] gossiping; and the street cars are full of the [illegible] have less of a crowd here and get eig [illegible] give them larger wages? I am [illegible] good wages, but I do not stop at eight hou [illegible]

Mr. GOMPERS. [illegible]

Senator NELSON. [illegible] at eight hours?

Mr. GOMPERS. [illegible] course, you can not. But this is t [illegible] get a month or fo [illegible] rest.

Senator NELSON. [illegible] had [illegible]

Senator NELSON. [illegible] ce is

Mr. GOMPERS. [illegible] at.

[illegible] morning?

[illegible] where is

that shall increase the minimum, when the power is vested in the executive officer, or the subordinates, to demand or simply request these people to come to work, and they must work.

Senator NELSON. I would give them pay for that extra time.

Mr. GOMPERS. If you want to provide extra pay for it, under the existing practice—that is, the seven-hour day, working overtime; or, if you say this: The hours of labor shall be seven, as they are now, that eight hours being recognized as the designated eight-hour day, and for all work performed beyond eight hours pay them. But where is the necessity of raising the minimum from seven to eight, when the power is already lodged in the departments?

Senator NELSON. Had we not better have a uniform law than to have certain officials calling on certain persons for extra time? Why should not one law govern all?

Mr. GOMPERS. The present law governs all.

Senator NELSON. I mean as to time, one rule be provided.

Mr. GOMPERS. This is the answer, that if there is no need for their work, why impose the work upon them?

Senator NELSON. I know and you know that in many of these departments they do not work overtime, while some of them do—the bulk of them do not work overtime. It is only occasional instances in some branches of the service, but in other branches they never work overtime.

Mr. GOMPERS. There are very few of them that do not work overtime at some time or other. May I suggest that if the gentlemen of this committee will call upon the officers of the departments and have their point of view on that species of legislation, on that amendment, and see what they think of it. I think it would not be a bad idea, if you did that anyway.

Senator NELSON. I want to give them, Mr. Gompers, good wages, but I can not see any reason why they should not work eight hours, from 9 o'clock until 5 o'clock. There is no hardship in that, even if we Senators have to work more than that.

Mr. GOMPERS. Sometimes.

Senator NELSON. And I know you work more than that.

Mr. GOMPERS. Yes, sir; I do that all the time. But there is no law except the law of the American Federation of Labor which provides that the president of the American Federation of Labor shall devote his entire time to the affairs of the federation.

Senator NELSON. My idea—if you will excuse me for interrupting you, and I do not want to do it so as to disarrange your statement—is that it seems to me that they ought to turn in eight hours' work a day, and if they are obliged to work more than that in any department, or any set of clerks, that they should get extra pay for it. That would put them all on a parity; those that do work extra would get pay for that extra time, and those that did not would not get it. That looks more equitable to me, and I would rather give them increased wages on that basis. I believe in giving these people good wages.

on authority and by men who hold the
ents that the efficiency of the Govern-
half past 3 in the afternoon—and
t the general average—you will

find that the errors creep in, and that whatever ineffective work is done occurs just about that time.

Senator NELSON. I want to say, in that connection, that I have discovered the same thing when I used to wander down to the departments to do business at the other end of the day, from 9 until half past 9 and sometimes 10 there was not much efficiency; in other words, it would take them, generally, until 10 o'clock to steam up. [Laughter.]

Mr. GOMPERS. If that be so—and, of course, anyone who may be there will understand that better—this is routine work, and I am not the creature or the developed character out of any national academy or university; I am the result of a factory operative, and I know whereof I speak; and if there is anything I do not know I will say I do not know, or I will qualify my statement; but that is true of every one who has a particular piece of work to do, that certain hours of every day—it is not to quite that extent, taking an hour to get up steam—but the first 10 or 15 minutes you can not get what, in the vernacular, "your hand in." You do not get into the swing of the thing for the first 15 minutes. You can not do it. I do not know what lawyers may do.

Senator VARDAMAN. I think we all agree with you that present wages are too low. The men and women who are doing the work in these departments are entitled to a living wage. During the time of emergency, in order that the Government can meet this great increased outlay, and at the same time do this work, do you not think it would be better to let these people do the eight hours a day work, and the additional work to be paid for at one a half times, or whatever may be fair, and give them good wages, wages that would enable them to live comfortably, than to bring in the new labor here and pay these old employees really less? Do you not think they would rather have it that way?

Mr. GOMPERS. I know they would rather have the conditions prevail as they are, so far as the hours of labor are concerned, leaving it to their superior officers to determine when they are required to labor longer hours and to give them additional wages, and surely they need them.

Senator VARDAMAN. They have got to have that.

Mr. GOMPERS. They have got to have that. It is looked upon as taking this opportunity to take advantage of these men and women in their helpless situation. They can not strike, and when they go into a political campaign they are punished for pernicious po[illegible] activity, and so they are bound hand and foot and can not [illegible] a protest.

It was, in view of this situation, that the executive council approved the proposition submitted to them by President Gompers that a conference of the representatives of the national and international trade-unions be called at Washington to consider the position which American labor should take toward the war situation. Accordingly a letter was sent to the representative officials of all national organizations, both those affiliated to the American Federation of Labor and those not affiliated, asking them to meet in Washington in the American Federation of Labor Building March 12. The executive council met on March 9 and devoted the following three days to the preparation of a statement to be submitted to the conference for consideration and action. There were present at that conference, in addition to the members of the executive council, 148 representatives of 79 affiliated organizations, 5 unaffiliated organizations, and 5 departments of the American Federation of Labor. The full list of those present is as follows:

Executive council: President, Samuel Gompers; secretary, Frank Morrison; treasurer, John B. Lennon; first vice president, James Duncan; second vice president, James O'Connell; third vice president, Joseph F. Valentine; fourth vice president, John R. Alpine; fifth vice president, H. B. Perham; sixth vice president, Frank Duffy; seventh vice president, William Green; eighth vice president, William D. Mahon.

Asbestos workers: Jos. A. Mullaney, V. E. McLelland.
Bakery and confectionery: A. A. Myrup, Charles F. Hohmann.
Bill posters and billers: P. F. Murphy, William McCarthy.
Blacksmiths: G. C. Van Dornes.
Boilermakers: J. A. Franklin, Charles F. Scott, A. E. Barksdale.
Bookbinders: A. P. Sovey.
Boot and shoe workers: C. L. Baine, Collis Lovely.
Brewery workmen: A. J. Kugler, Joseph Obergfell, John Sullivan.
Bricklayers: Thomas R. Preece.
Bridge and structural iron workers: Joseph E. McClory, Edward Ryan.
Carmen, railway: M. F. Ryan, J. F. McCreery, J. S. Wilds, R. E. Hamilton.
Carpenters, United Brotherhood: Frank Duffy.
Carriage, wagon, automobile workers: William A. Logan.
Cigarmakers: G. W. Perkins, Samuel Gompers.
Clerks, post office: Thomas F. Flaherty.
Clerks, railway: James J. Forrester.
Clerks, railway postal: Carl Freeman.
Clerks, retail: E. E. Baker.
Coopers: Andrew C. Hughes.
Diamond workers: Andries Meyer.
Electrical workers: F. J. McNulty, William A. Hogan, W. S. Godshall, J. J. Purcell, George L. Kelley, J. S. McDonagh.
Elevator constructors: Frank Feeney, Frank Schneider.
Engravers, photo: Matthew Woll.
Firemen: Timothy Healy, Newton A. James.
Fur workers: A. W. Miller.
Garment Workers, United: Thomas A. Rickert, B. A. Larger, Abe Berkson.
Glass bottle blowers: John A. Voll, Harry Jenkins, James Maloney.
Glass workers, flint: William P. Clark.
Granite cutters: James Duncan.
Hat and cap makers: M. Zuckerman, Max Zaritsky.
Hatters: John W. Sculley, Martin Lawlor.
Hodcarriers: D. D'Alessandra.
Horseshoers: Hubert S. Marshall, John F. Kane.
Hotel and restaurant employees: Edward Flore.
Iron, tin, and steel workers: John Williams, M. F. Tighe.
Jewelry workers: Julius Birnbaum, Abraham Greenstein.
Lace operatives: David L. Gould.
Lathers, wood, wire: William J. McSorley.
Laundry workers: Harry L. Morrison.
Leather workers on horse goods: W. E. Bryan.
Longshoremen: Anthony J. Chlopek, William F. Dempsey.
Machinists: William H. Johnston, Fred Hewitt, E. L. Tucker, A. E. Holder.
Maintenance of way employees: Allan E. Barker, Henry Irwin.
Masters, mates, and pilots: J. H. Pruett, Ulster Davis, Alfred B. Devlin, Robert S. Lavender.
Meat cutters and butcher workmen: Homer D. Call.

Metal polishers: W. W. Britton.
Metal workers, sheet: John J. Hynes, O. E. Hoard, Harry H. Stewart.
Mine workers, United: William Green, Van Bittner, William Diamond.
Molders, iron: John P. Frey.
Musicians: Joseph N. Weber, J. E. Birdsell.
Painters: George F. Hedrick, J. C. Skemp.
Pattern makers: James Wilson, James L. Gernon, A. J. Berres.
Paving cutters: Carl Bergstrom.
Plasterers, operative: E. J. McGivern, Charles Smith.
Plate printers: James E. Goodyear, William G. Holder.
Plumbers: John R. Alpine, William J. Spencer, William J. Tracy.
Potters, operative: Edward Menge, Frank H. Hutchins, John T. Wood, S. M Moore.
Print Cutters: Ralph T. Holman.
Printing pressmen: Joseph C. Orr, Henry J. Hardy.
Quarry workers: Fred W. Suitor.
Railway employees, street and electric: W. D. Mahon.
Roofers, composition: J. T. Hurley.
Seamen's union: Andrew Furuseth, V. A. Olander.
Signalmen, railroad: A. E. Adams.
Steel plate transferers: Benjamin Goldsworthy.
Stage employees, theatrical: Charles C. Shay.
Steam shovel and dredgemen: T. J. Brady.
Stereotypers and electrotypers: James S. Briggs.
Stonecutters: Sam Griggs, Walter W. Drayer.
Switchmen: S. E. Heberling.
Tailors: Thomas Sweeney.
Teachers: Charles B. Stillman.
Teamsters: Daniel J. Tobin, P. H. Jennings.
Telegraphers, railroad: H. B. Perham, J. F. Miller.
Textile workers: John Golden.
Tobacco workers: A. McAndrew, E. Lewis Evans.
Tunnel and subway constructors: Michael J. Carraher, Tito Pacelli.
Upholsterers: James H. Hatch, John Hanley.
Weavers, American wire: John F. Curley.
White rats actors: Jack Hayden.

UNAFFILIATED ORGANIZATIONS.

Locomotive firemen and enginemen: W. S. Carter.
Railway trainmen: W. G. Lee.
Railway conductors: L. E. Sheppard.
Locomotive engineers: W. S. Stone.
National window-glass workers: Herbert Thomas.

AMERICAN FEDERATION OF LABOR DEPARTMENTS.

Building trades department: John Donlin.
Metal trades department: A. J. Berres.
Mining department: James Lord.
Railroad employees department: A. O. Wharton.
Union label trades department: J. W. Hays.

The declaration was submitted to the conference. A spirit of intense seriousness pervaded the deliberations. The representatives of the workers in practically every trade had encountered new situations developing out of defense measures that made them realize the nearness of war and its consequence to the labor movement. With profound attention they listened to the reading of the following declaration:

AMERICAN LABOR'S POSITION IN PEACE OR IN WAR.

We speak for millions of Americans. We are not a sect. We are not a party. We represent the organizations held together by the pressure of our common needs. We represent the part of the Nation closest to the fundamentals of life. Those we represent wield the Nation's tools and grapple with the forces that are brought under control in our material civilization. The power and use of industrial tools is greater than the tools of war, and will in time supersede agencies of destruction.

A world war is on. The time has not yet come when war has been abolished. Whether we approve it or not, we must recognize that war is a situation ith which we must reckon. The present European war, involving as it does e majority of civilized nations and affecting the industry and commerce of the hole world, threatens at any moment to draw all countries, including our own, ito the conflict. Our immediate problem, then, is to bring to bear upon war onditions instructive forethought, vision, principles of human welfare and nservation that should direct our course in every eventuality of life. The ay to avert war is to establish constructive agencies for justice in times of ace and thus control for peace situations and forces that might otherwise sult in war.

The methods of modern warfare, its new tactics, its vast organization, both ilitary and industrial, present problems vastly different from those of preious wars. But the Nation's problems afford an opportunity for the establishent of new freedom and wider opportunities for all the people. Modern warre includes contests between workshops, factories, the land, financial and ansportation resources of the countries involved, and necessarily applies to e relations between employers and employees; and, as our own country now ces an impending peril, it is fitting that the masses of the people of the nited States should take counsel and determine what course they shall pursue ould a crisis arise necessitating the protection of our Republic and defense of e ideals for which it stands.

In the struggle between the forces of democracy and special privilege, for just nd historic reasons the masses of the people necessarily represent the ideals nd the institutions of democracy. There is in organized society one potential rganization whose purpose is to further these ideals and institutions—the rganized-labor movement.

In no previous war has the organized-labor movement taken a directing art.

Labor has now reached an understanding of its rights, of its power and esources, of its value and contributions to society, and must make definite onstructive proposals.

It is timely that we frankly present experiences and conditions which in rmer times have prevented nations from benefiting by the voluntary, wholearted cooperation of wage earners in war time and then make suggestions ow these hindrances to our national strength and vigor can be removed.

War has never put a stop to the necessity for struggle to establish and maintain industrial rights. Wage earners in war times must, as has been said, keep ne eye on the exploiters at home and the other upon the enemy threatening the ational Government. Such exploitation made it impossible for a warring ation to mobilize effectively its full strength for outward defense.

We maintain that it is the fundamental step in preparedness for the Nation o set its own house in order and to establish at home justice in relations etween men. Previous wars, for whatever purpose waged, developed new pportunities for exploiting wage earners. Not only was there failure to recogize the necessity for protecting rights of workers, that they might give that holehearted service to the country that can come only when every citizen njoys rights, freedom, and opportunity, but under guise of national necessity abor was stripped of its means of defense against enemies at home and was obbed of the advantages, the protections, the guaranties of justice that had een achieved after ages of struggle. For these reasons workers have felt that, o matter what the result of the war, as wage earners they generally lost.

In previous times labor had no representatives in the councils authorized to eal with the conduct of war. The rights, interests, and welfare of workers ere autocratically sacrificed for the slogan of "national safety."

The European war has demonstrated the dependence of the Governments pon the cooperation of the masses of the people. Since the masses perform dispensable service it follows that they should have a voice in determining the onditions upon which they give service.

The workers of America make known their beliefs, their demands and their rposes through a voluntary agency which they have established—the organd labor movement. This agency is not only the representative of those who ectly constitute it, but it is the representative of all those persons who have amon problems and purposes but who have not yet organized for their ilevement.

Whether in peace or in war the organized labor movement seeks to make all else subordinate to human welfare and human opportunity. The labor movement stands as the defender of this principle and undertakes to protect the wealth producers against the exorbitant greed of special interests, against profiteering, against exploitation, against the detestable methods of irresponsible greed, against the inhumanity and crime of heartless corporations and employers.

Labor demands the right in war times to be the recognized defender of wage earners against the same forces which in former wars have made national necessity an excuse for more ruthless methods.

As the representatives of the wage earners we assert that conditions of work and pay in Government employment and in all occupations should conform to principles of human welfare and justice.

A nation can not make an effective defense against an outside danger if groups of citizens are asked to take part in a war though smarting with a sense of keen injustice inflicted by the Government they are expected to and will defend.

The cornerstone of national defense is justice in fundamental relations of life—economic justice.

The one agency which accomplishes this for the workers is the organized labor movement. The greatest step that can be made for national defense is not to bind and throttle the organized labor movement but to afford its greatest scope and opportunity for voluntary effective cooperation in spirit and in action.

During the long period in which it has been establishing itself, the labor movement has become a dynamic force in organizing the human side of industry and commerce. It is a great social factor, which must be recognized in all plans which affect wage earners.

Whether planning for peace or war the Government must recognize the organized labor movement as the agency through which it must cooperate with wage earners.

Industrial justice is the right of those living within our country. With this right there is associated obligation. In war time obligation takes the form of service in defense of the Republic against enemies.

We recognize that this service may be either military or industrial, both equally essential for national defense. We hold this to be incontrovertible that the Government which demands that men and women give their labor power, their bodies or their lives to its service should also demand the service, in the interest of these human beings, of all wealth and the products of human toil—property.

We hold that if workers may be asked in time of national peril or emergency to give more exhausting service than the principles of human welfare warrant, that service should be asked only when accompanied by increased guaranties and safeguards, and when the profits which the employer shall secure from the industry in which they are engaged have been limited to fixed percentages.

We declare that such determination of profits should be based on costs of processes actually needed for product.

Workers have no delusions regarding the policy which property owners and exploiting employers pursue in peace or in war and they also recognize that wrapped up with the safety of this Republic are ideals of democracy, a heritage which the masses of the people received from our forefathers, who fought that liberty might live in this country—a heritage that is to be maintained and handed down to each generation with undiminished power and usefulness.

The labor movement recognizes the value of freedom, and it knows that freedom and rights can be maintained only by those willing to assert their claims and to defend their rights. The American labor movement has always opposed unnecessary conflicts and all wars for aggrandizement, exploitation, and enslavement, and yet it has done its part in the world's revolutions, in the struggles to establish greater freedom, democratic institutions, and ideals of human justice.

Our labor movement distrusts and protests against militarism, because it knows that militarism represents privilege and is the tool of special interests, exploiters, and despots. But while it opposes militarism, it holds that it is the duty of a nation to defend itself against injustice and invasion.

The menace of militarism arises through isolating the defensive functions of the State from civic activities and from creating miltary agences out of touch with masses of the people. Isolation is subversive to democracy—it harbors and nurtures the germs of arbitrary power.

:he labor movement demands that a clear differentiation be made between itary service for the nation and police duty, and that military service should carefully distinguished from service in industrial dsputes.

Ve hold that ndustrial service shall be deemed equally meritorious as mili- y service. Organization for industrial and commercial service is upon a ferent basis from military service—the civic ideals still dominate. This ould be recognized in mobilizing for ths purpose. The same voluntary insti- ions that organized industrial, commercial, and transportation workers in es of peace will best take care of the same problems in time of war.

It is fundamental, therefore, that the Government cooperate with the Ameri- n organized labor movement for this purpose. Service in Government facto- s and private establishments, in transportation agencies, all should conform trade-union standards.

The guaranties of human conservation should be recognized in war as well as peace. Wherever changes in the organization of industry are necessary upon war basis they should be made in accord with plans agreed upon by repre- ntatives of the Government and those engaged and employed in the industry. e recognize that in war, in certain employments requiring high skill, it is cessary to retain in industrial service the workers specally fitted therefor. any eventuality when women may be employed we insist that equal pay for nal work shall prevail without regard to sex.

Finally, in order to safeguard all the interests of the wage earners organized or should have representation on all agencies determining and administering licies of national defense. It is particularly important that organized labor ould have representatives on all boards authorized to control publicity during ir times. The workers have suffered much injustice in war times by limita- ns upon their right to speak freely and to secure publicity for their just levances.

Organized labor has earned the right to make these demands. It is the ency that in all countries stands for human rights and is the defender of the lfare and interests of the masses of the people. It is an agency that has ernational recognition which is not seeking to rob, exploit, or corrupt foreign vernments, but instead seeks to maintain human rights and interests the rld over, nor does it have to dispel suspicion nor prove its motives either at me or abroad.

The present war discloses the struggle between the institutions of democracy d those of autocracy. As a Nation we should profit from the experiences of er nations. Democracy can not be established by patches upon an auto- atic system. The foundations of civilized intercourse between individuals st be organized upon principles of democracy and scientific principles of man welfare. Then a national structure can be perfected in harmony with manitarian idealism—a structure that will stand the test of the necessities of ace or war.

We, the officers of the National and International Trade-Unions of America national conference assembled in the Capital of our Nation, hereby pledge rselves in peace or in war, in stress or in storm, to stand unreservedly by the ndards of liberty and the safety and preservation of the institutions and als of our Republic.

In this solemn hour of our Nation's life it is our earnest hope that our Republic y be safeguarded in its unswerving desire for peace; that our people may be ured the horrors and the burdens of war; that they may have the opportunity cultivate and develop the arts of peace, human brotherhood, and a higher ilization.

But, despite all our endeavors and hopes, should our country be drawn into maelstrom of the European conflict, we, with these ideals of liberty and tice herein declared as the indisepnsable basis for national policies, offer our vices to our country in every field of activity to defend, safeguard, and pre- re the Republic of the United States of America against its enemies whom- ver they may be, and we call upon our fellow workers and fellow citizens in holy name of labor, justice, freedom, and humanity to devotedly and patri- ally give like service.

fter careful consideration and thorough discussion of each paragraph of the aration the members of the conference unanimously adopted it. Thus the aration of labor's attitude whether in peace or in war was unanimously forth by the conference before the declaration of war by the Congress of United States.

In addition to the declaration of principle it is necessary to organize agencie for carrying the declaration into effect. As was reported to the Baltimore con vention, President Wilson appointed the president of the American Federatio of Labor one of the seven men composing the advisory commission to the Cou cil of National Defense. In carrying on the work of the advisory commission eac member of the commission was authorized to appoint a committee to help hi in performing his duties. Mr. Gompers, as chairman of the committee on lab including conservation and welfare of workers, asked a number of represent tive men and women to accept membership on his committee. Since th jurisdiction of the committee was to be as wide as the labor relation arisin out of war work for the Government, it was fitting that the members of th committee should represent all elements concerned in determining or regulatin labor conditions. The personnel of the committee, therefore, included em ployers of labor, financiers, directors of corporations, publicists, technicians a well as representatives of men and women employed as wage earners. Th functions of the committee were purely advisory and necessarily subject t the approval of the advisory commission and the Council of National Defens For practical work the following committees were organized: Executive com mittee, wages and hours, mediation and conciliation, women in industry, i formation and statistics, press, publicity, cost of living and domestic econom welfare work, which includes the following divisions: Industrial safety, san tation, vocational education, housing, recreation, public education in healt matters, standard guides for employers.

ENGLISH LABOR COMMISSION.

Realizing that the experience of workers in other countries who had be meeting and solving labor war problems would be of benefit to the workers this country who were taking the initial steps in war matters, Preside Gompers cabled to Premier Lloyd George of Great Britain and Premier Ribot France asking them to send representative labor men to advise with Americ workers. Mr. Lloyd George promptly cabled that he would send a commiss of labor men as requested. Ambassador Jusserand of France wrote M Gompers that he was instructed by his government to see that the best a most appropriate plan for Mr. Gompers to follow in securing representatives French workers was to communicate directly with Mr. Jouhaux, asking him send two French workmen. In accord with this suggestion Mr. Gompers cabl to Mr. Jouhaux and Mr. Keufer of Paris. A cable in reply was received to t effect that it was impossible for the French labor movement to comply wi the request from America. Upon the receipt of the cable from the Briti Government a similar request was sent to the Prime Minister of Canada th Canadian representatives of labor be sent to the conference. The British co mission consisted of the following:

Right Hon. C. W. Bowerman, Privy Councillor and member of British Hou of Commons; secretary of British Trades Union Congress Parliamenta Committee.

Right Hon. James H. Thomas, Privy Councillor, member of Parliamen general secretary National Union of Railwaymen, Great Britain and Ireland.

Joseph Davies, member of the secretariat of the prime minister.

H. W. Garrod, representing labor, department of Ministry of Munitions.

The Canadian representatives were:

J. C. Waters, president of the Trades and Labor Council of Canada.

Gideon D. Robertson, vice president of the National Association of Railw Telegraphers.

As soon as the British delegates arrived in this country a meeting of t committee on labor was arranged for April 2. There was a large attendan at the meeting which lasted all day and evening. The Bristish labor men we given ample opportunity to relate the full story of the war experiences of t English workers and to tell how the British Government and the Engli workers have worked out their joint problems and to answer all questi asked by the members of the committee on labor. The valuable informati presented in these meetings was recorded stenographically, published in t American Federationist, and later was made a Senate document.[1]

Arrangements were made for the British delegates to visit some of the dustrial centers and to speak to representative audiences in various cities wh

[1] The document is No. 84, 65th Congress, 1st session.

included New York, Pittsburgh, Chicago, Cleveland, Albany, Schenectady, and Boston. In these meetings the members of the British Labor Commission told how the English people were meeting their labor problems arising out of war work and conditions and made suggestions to Americans how to deal with local situations.

SOLDIERS' AND SAILORS' COMPENSATION.

One of the most conspicuous services rendered by the committee on labor is the soldiers' and sailors' compensation legislation. In the first meeting of the executive committee of the committee on labor, compensation to be paid to soldiers and sailors and the problem of taking care of their families were discussed. Later, through Mr. Gompers, the matter was presented to the Council of National Defense with the suggestion that the committee on labor be authorized to take up the whole subject matter and to draft appropriate legislation. The suggestion was approved by the Council of National Defense. Mr. Gompers appointed Judge Julian W. Mack as chairman of the committee to draft the legislation. This committee reported to the executive committee of the committee on labor the most comprehensive legislation of this character ever drafted.

Judge Mack and his committee afterwards cooperated with the committee appointed by the Treasury Department to investigate the matter of insurance for soldiers and sailors and to make a report to that department. As a result of the conference the bill, as drawn by Judge Mack, was adopted as the report of the Treasury committee, and in this form was approved by the Council of National Defense and by the President of the United States. The bill thus became an administration measure.

The military and naval compensation and insurance bill [illegible] the work of the Bureau of War-Risk Insurance, which was established at the beginning of the war, first, to provide insurance for ships and then for merchant seamen. It is a great step forward in giving to the men in the service not charity, but justice; in telling them in advance just what they will get, and thus freeing them and their families from that worst of all fears, the fear that they and their loved ones may become objects of charity.

It provides for a generous contribution by the Government to the wife and the children of all enlisted men during the period that the [illegible] fighting for his country, but it does not absolve him from [illegible] contributing in proportion to his pay to their support. [illegible] child must give at least $15 a month; if his pay exceeds $[illegible] give more than that, up to one-half his pay, provided the [illegible] tributes more than that. The Government adds [illegible] orphan child, up to $50 for a wife and five children. [illegible] to give anything to other dependents, he may give [illegible] dependent father, mother, brother, sister, or grandfather [illegible] Government will help along. The highest amount [illegible] ment adds is $50 a month.

If a man becomes disabled or dies in the [illegible] no longer given a gratuitous pension, but [illegible] analogy to the compensation given to workingmen [illegible] Government. But this disability compensation [illegible] any other law. It takes the family as the [illegible] the individual man. It bases the compensation [illegible] time to time. While a totally disabled bachelor [illegible] with a wife and four children will get $[illegible] if a nurse or attendant is required; $30 [illegible] months; but if he loses both feet, both hands [illegible] blind or helplessly bedridden, he gets $[illegible] married or not. In case of his death [illegible] in the line of duty, the widow and [illegible] ranging from $20 to $75 a month, according [illegible] distinction is made between a private and the [illegible]

But the great new feature of this bill [illegible] progressive social legislation of any country [illegible] Men who go into the war can not [illegible] rate companies necessarily charge a premium [illegible] people bear the war risk. The Government [illegible] peace-time rates; but, more than this, it [illegible]

panies charge in peace times: it cuts off all that they add for expenses. this is done because the Government, in the first place, has only the expen administration and none of the other expenses that private companies h and, in the second place, because it was believed right and just that the e people should bear the cost of administering this branch of the service. A the only sensible kind of insurance for a man to take when, as in these case is about to go into an extrahazardous employment for a short time, is the c est possible insurance, the Government is offering only that—a yearly rene term insurance that costs a man of 29 about $8 per thousand annually. B that kind of insurance costs more each year and would be a terrible burd the man reached old age, the law compels him to change it into one of the nary forms, costing somewhat more but much better as a permanent t within five years after the war. This permanent insurance, however, will be issued at net rates without any charge for expenses.

Men must make up their minds promptly whether they want the insuran not. They are given four months' time, and any man, private or officer, can from $1,000 to $10,000 worth of it. The insurance is wisely guarded. It ca be assigned: it can not be taken by creditors either of the insured or o beneficiary; it is payable only to certain relatives—wife, child, grand parent, brother, or sister; and when it falls due it will not be paid out in a sum, but in monthly installments over a period of 20 years, with 3½ per interest on the unpaid installments. That means that on a $10,000 insu policy the family will get $57.50 a month for 20 years. And for good me the Government has thrown in this additional provision, that if a man bec totally and permanently disabled these monthly payments will begin, and will continue during his entire life, even though he lives more than 20 yea

HOUSING.

Another big problem upon which the labor committee has been helpi the housing problem resulting from congestion in centers where war pr tion is being carried on and where the number of workers that have gathered together far exceed the provisions for housing them The sub mittee on housing of the committee on labor investigated the situation ex in many localities. As a result of the investigation and the data secur was shown that in places where work necessary for the continuation o war was being carried on there was already inadequate housing and such ditions that the necessary number of workers could not be secured, be they could not find lodging. This situation was reported to the advisory mission and the Council of National Defense. It was agreed by these bodies that a commission be appointed, upon which labor was represent Mr. William J. Spencer, secretary-treasurer of the building-trades depart of the American Federation of Labor.

This committee is to report definite plans, and the matter is then brought to the President of the United States for consideration for such a as may be immediately necessary to meet emergencies.

Other subcommittees of the committee on labor have under consider proposals that will be submitted at the proper time.

LABOR REPRESENTATION.

In accord with the policy adopted by the Baltimore convention, that earners should have representatives on all Government boards, commi and agencies dealing with matters which concern wage earners, an effor been made by the organized labor movement to secure proper represent on agencies carrying on defense work. Representatives of wage earner upon many of the State and local committees cooperating with the nat council.

One of the first war measures which vitally concern wage earners wa selective-conscription act. To see that this law was administered withou crimination and prejudice was of vital concern to them. The president o American Federation of Labor presented to the War Department that sentatives of wage earners should be appointed on the district exem boards, which had appellate jurisdiction over all exemption cases and jurisdiction over industrial cases. These district boards were to consi five persons. President Gompers was asked to submit the name of one

earner for membership upon each board. Representative labor men in each State were asked to send names, which were submitted to the War Department. Upon practically every district exemption board there is a representative of wage earners.

From time to time there have been constituted various boards and commissions to deal with different phases of war work. Wherever this work concerned wage earners a request has been made for representation. There are now wage earners on the most important agencies dealing with such work: Mr. John Donlin, president of the Building Trades on the Emergency Construction Board; Mr. John P. White, president of the United Mine Workers of America, assistant to Dr. Harry A. Garfield, Fuel Administrator; Mr. Charles L. Bulne on the special committee on war savings certificates appointed by Secretary McAdoo; Miss Agnes Nestor, first vice president of the Glove Makers, on the Women's Board; Mr. J. W. Sullivan, member of the International Typographical Union, and Mr. William N. Doak, vice president and legislative committeeman of the Railway Trainmen, on the Food Administration Board; Mr. Hugh Frayne, organizer for the American Federation of Labor, on the War Industries Board, which acts as a clearing house for the war-industry needs of the Government, determining the most effective way of meeting them and the best means and methods of increasing production, including creation or extension of industries demanded by the emergency, the sequence and relative urgency of the needs of the different Government services, and which also considers price factors and, in first instance, the industrial and labor aspects of problems involved and general questions affecting the purchase of commodities. The work of the committee is subdivided into the following divisions: Raw materials, finished products, priorities. All labor relations connected with any of these divisions are referred to the labor representative, Mr. Frayne. An effort is now under way to secure proper labor representation on all subcommittees.

Labor's War Agreements and Representation.

Under the hegemony of the American Federation of Labor the workers of America have constantly pressed home upon governmental industrial agencies the right of the workers to be represented by the responsible spokesmen of the toilers. While there is yet much to be attained, considerable progress has been made in putting labor's demand into practice in everyday living.

In addition to representation on boards and commissions that are authorized to determine war plans and policies, there are other agencies that carry these problems and polices into effect. Another type of labor war problems is associated with the activities with these boards—problems growing out of employment. The most imperative war need that confronted the Government after the declaration of war and the passage of the conscription act was the construction of cantonments for housing enlisted men during the period of training. The War Department had the gigantic task of construction 16 cantonments and 16 camps to be ready for the soldiers when called into active service. The essence of success in achieving this gigantic construction feat was uninterrupted production by mutual moral obligation.

AGREEMENTS.

Secretary of War Baker understood that continuous production could not be secured without the cooperation of the working men and he knew that that cooperation was contingent upon just wages and treatment. In order that there might be a proper understanding as a basis for cooperation, a memorandum of agreement was signed by Secretary of War Baker and President Gompers, which provided that the basic standards for employment in cantonment construction should be the union scale of wages, hours, and conditions in force June 1, 1917, in the locality where the cantonment was situated. The full text of the agree ment is as follows:

"For the adjustment and control of wages, hours, and conditions of labor in the construction of cantonments, there shall be created an adjustment commission of three persons, appointed by the Secretary of War: one to represent the Army, one the public, and one labor: the last to be nominated by Samuel Gompers, member of the Advisory Commission of the Council of National Defense, and President of the A. F. of L.

John R. Alpine, president United Association of Plumbers, Gas, Steam, and Hot Water Fitters, etc., per S. G.

Milton Snellings, president International Union of Steam and Operating Engineers, per S. G.

Joseph A. Franklin, president International Brotherhood of Boilermakers, Iron Ship builders, and Helpers of America, per A. J. B.

Jas. Wilson, president Patternmakers' League of North America, per S. G.

J. W. Kline, president International Brotherhood of Blacksmiths of America, per S. G.

W. W. Britton, president Metal Polishers, Buffers, Platers, Brass and Silver Workers' Union of North America.

J. J. Hynes, president Amalgamated Sheet Metal Workers' International Alliance.

Submitted as signed August 25, 1917:

LOUIS B. WEHLE.

The board constituted under this agreement consists of V. Everett Macy, representing the public, appointed by President Wilson; L. A. Coolidge, representing the Fleet Corporation, and A. J. Berres, representing organized labor and appointed by President Gompers.

The Shipping Board entered into the following agreement with the Longshoremen's International Association:

[Agreement for the adjustment and control of wages, hours, and conditions of labor in the loading and unloading of vessels on the Atlantic, Gulf, and Pacific coasts.]

For the adjustment and control of wages, hours, and conditions of labor in the loading and unloading of vessels there shall be created a national adjustment commission, located in Washington, D. C., comprised as follows: One member nominated by the Shipping Board; one nominated by the Secretary of War; one nominated by the International Longshoremen's Association; one nominated by the committee on shipping of the Council of National Defense, to represent the coastwise carriers and to act only in cases involving coastwise service; one nominated by the committee on shipping of the Council of National Defense, to represent carriers engaged in foreign trade, and to act only in cases involving foreign services.

The national adjustment commission shall appoint in each important port a local adjustment commission, comprised as follows: One member to represent the Shipping Board and War Department; one to represent the International Longshoremen's Association, nominated by the International Longshoremen's Association; one to represent the carriers in foreign trade, nominated by the committee on shipping of the Council of National Defense, and to act only in cases involving foreign service; one nominated by the committee on shipping of the Council of National Defense, to represent carriers engaged in coastwise trade, and to act only in cases involving coastwise trade.

The union scale of wages, hours, and conditions in force August 1, 1917, in said port shall be adopted as the basic standard with reference to each such port.

All differences which may arise in any particular port shall be adjusted by the local commission if possible. In case either party is dissatisfied with the decision of the local commission it may appeal to the national commission for a review.

In case of expiration of any agreement as to scale of wages, hours, and conditions now in force the national commission shall adjust the new scale of wages, hours, and conditions, provided an agreement can not be reached by the employers and the union.

Consideration shall be given to special circumstances, if any, arising after said date of August 1 or after the acceptance of a new scale of wages, hours and conditions which may require particular advances in wages or changes in other standards.

In all cases work shall continue uninterruptedly pending the action of the local commission or the decision of the national adjustment commission.

All adjustments of wages, hours, and conditions made by the national commission shall be binding on all parties.

The commission shall adopt rules of procedure and [illegible] meaning of this agreement and any ruling made by it th[illegible]

The board constituted under this agreement consists [illegible] Stevens, United States Shipping Board; Stanley K[illegible]

P. A. S. Franklin and H. H. Raymond for the ship operators; and T. V. O'Conner for the International Longshoremen's Association.

In addition to this agreement with the longshoremen the Shipping Board entered into an agreement which was to enable them to secure the cooperation of the seamen of the country and to offer to these workers inducements to remain in their calling and to bring back others who had left the calling and to attract American citizens of worth to accept service on board ships. A sufficient supply of seamen is indispensable to the merchant vessels of our country, and the Shipping Board felt that the only basis upon which they could rightly expect such a supply was by assuring fair conditions of work and pay to the seamen. At a conference held in Washington on August 8, at which were present six representatives of the shipowners, six representatives of the seafaring employees, a representative each from the Department of Commerce, the Department of Labor, and the Shipping Board, the following memorandum was adopted:

"The representatives of the steamship lines and of the organized seamen agreed with the Shipping Board that some action ought to be taken looking to an increase in the number of seamen in order to furnish men for the vessels trading to England and France carrying supplies and to yet continue an uninterrupted coastwise trade.

"To attain this purpose the representatives of the shipping lines in cooperation with the Shipping Board and the organized seamen tentatively agreed to cooperate for the attainment of this end in the following manner:

"Substantially all the steamship lines will agree to pay the following wage: Sailors and firemen, $60 per month; coal passers, $50 per month; oilers and water tenders, $65 per month: boatswains, $70 per month; carpenters, $75 per month; overtime pay for cargo work 50 cents, for ship work, 40 cents per hour. Bonus going to the war zone 50 per cent of the wages, wages and bonus to continue until crew arrive back in the United States; $100 compensation for loss of effects caused by war conditions. The scale of wages and bonus for cooks and stewards at present in force be maintained and continued during the continuance of this agreement.

"That a certain number of boys, determined by the number of men carried, are to be employed in addition to the usual crew; that a number of ordinary seamen will be employed in proportion to the able seamen carried, taking as an instance a vessel now carrying eight men on deck will carry six able seamen, two ordinary seamen, and two boys, such boys and ordinary seamen to have ample opportunity to learn the work usually demanded of able seamen.

"That the representatives of the organized seamen shall have access to and be permitted on docks and vessels during reasonable hours.

"The representatives of the seamen tentatively agree to join with the shipowners in an appeal to seamen now employed on shore to come back to the sea.

"That the bonus and other conditions arising from the war shall terminate with the war and that the wages set shall remain for one year to the end that wages be stabilized and that the men now on shore may be induced to return to the sea.

"That the seamen will use earnest efforts in cooperation with the officers to teach seamanship to the boys and ordinary seamen."

The memorandum was afterwards ratified by the organizations represented in the conference.

For years the leather workers have been struggling to secure just terms and conditions on contract work for the Government. The following agreement was entered into by the United States of America and employes and employers in the leather-goods industries:

[Agreement between the United States of America and the parties hereunto subscribed.]

1. There shall be created a national harness and saddlery adjustment commission hereinafter referred to as "the commission," composed of four members, of which two members shall be appointed by the Secretary of War to represent the public, one member by the manufacturers signatory hereto, and one member by the United Leather Workers' International Union. One of the members of this commission appointed by the Secretary of War shall be designated by him as chairman. Each member, including the chairman, shall be entitled to one vote, and a majority vote shall govern in all cases.

2. The commission shall adjust all differences now existing or that may hereafter arise between the contractors and employes engaged in the production of articles under agreement to which the United States is a party, including

wages, hours, and conditions of labor. The commission may adopt rules, re lations, and methods of procedure in order to carry this agreement into eff and all decisions or adjustments made by it shall be binding upon and c piled with by the contractors signatory hereto, who have contracts with United States, and also by the operatives, members of the United Lea workers' International Union, represented in the execution of this agreem by their president.

3. This agreement shall be in full force and effect for the duration of present war.

4. The parties hereto severally agree that during the war there shall be interruption of work upon which they are engaged in the carrying out of tracts to which the United States is a party.

5. In the event that any changes in wage scales are made or approved by commission in carrying out its functions under this agreement, compensat adjustments shall be made by the United States in accordance with the rec mendations of the commission.

6. The scale of wages for operatives for work done under contracts to wh the United States and the contractors signatory hereto are parties shall in case be less than is now in effect.

7. The contractors signatory hereto agree that nonunion labor employed carrying out work under a contract to which the United States is a party sl receive the same rates of compensation as the members of the United Lea Workers' International Union.

SEPTEMBER 26, 1917.

Manufacturers: The Strecker Bros. Co.; Nashville Saddlery Co.; Melm Burrall Co.; Walter Boyt Saddlery Co.; The Julius J. Bantlin Co.; Mo Bros.; The J. H. & F. A. Sells Co.; Kansas City Saddlery Co., by H. B. Will president; G. H. Schoellkopf Saddlery Co.; John C. Nichols Harness Manu turing Co., by John C. Nichols; Columbia Harness Co., by B. H. Pye, presid Janney Semple Hill & Co., by James A. Mayer; William Purcell Harness Co. William Purcell; Hart Saddlery Co., by W. R. Medearis, vice president; Ruv Saddlery Co., by Joseph E. Ruwart, president; Dorries & Co. (Inc.), by A Butler, president; A. N. Edwards, Chicago, Ill.; Armstrong & Graham, Det Mich., by Edwin E. Armstrong; Sears Saddlery Co., by I. L. Sears, presid J. B. Sickles Saddlery Co., by secretary; Henry Hotze & Sons, per Henry Ho J. Straus Saddlery Co., by I. Sickel, secretary and treasurer; Rice, Sorin dlery Co., by H. E. Rice, president; Charles Kronauer & Co., by Chr Kronauer; The Waterloo Saddlery Co.; Paris Saddlery Co., by W. A. Ca president; Fort Wayne Saddlery Co., B. H. Thompson, manager; Harbis Gathright, by Owen Gathright; Forman Breen Manufacturing Co., by E Breen, president; Des Moines Saddlery Co., by G. M. Braband; The Atch Saddlery Co., by Henry Diegel; Straus Bodenheimer Saddlery Co., by A. Bo heimer, president; S. C. Gallup Saddlery Co., by James Wimmer, presid Clinton Saddlery Co., B. Thompson, president; J. H. Haney & Co., by J Haney; Scheffer & Rossum Co., by J. W. Gaver, president; Frank F. Kres F. F. Kress; La Porte Harness Co., O. H. Worch, president; Dodson Sadd Co., by E. C. Dodson, president; L. Frank Saddlery Co., by Henry Othmer; T son Bros. Saddlery Co., by F. Schankenberg; W. Davis & Sons, by J. W. Ga F. S. Johnson & Co., by J. W. Gaver; Keyston Bros., by J. W. Gaver; A Van Boorhies & Co., by J. W. Gaver; Brauer Bros. Manufacturing Co.; worth Haffner Co.; Hess & Hopkins Leather Co.; Naylon-Pierson-Hough Hermann Sanford Saddlery Co., Springfield, Mo.; Indianapolis Saddlery Indianapolis, Ind.; Simmons Saddlery Co., St. Louis, Mo.; J. P. Krieger dlery Co., Louisville, Ky.; Kline Savidge Co., Philadelphia, Pa.; Duncan & (Inc.), Seattle, Wash.; The Wolf Manufacturing Co., Quincy, Ill.; Lerch B (Inc.), Baltimore, Md.

Leather workers: W. E. Bryan, general president United Leather Work International Union, 504-505 Postal Building, Kansas City, Mo.

The board constituted under this agreement is composed of the follow Henry Diegel, W. E. Bryan, Col. John S. Fair, Maj. John R. Simpson, Stanley King.

These various agreements constituted but a beginning of the necessary or zation of relations between workers engaged upon war work and the Gov ment. There remains yet the broad field of the production of supplies munitions. Agreements for the adjustment of labor relations upon this n sary work must be based upon the same principles embodied in the agreem

rendy consummated, accepting as basic standards union conditions of hours and ork already established, together with provisions for meeting higher wages ecessary to meet increasing costs of living. It is our hope that agreements vering this important general field will soon be entered into by the Government and the organizations of the workers concerned.

INTERNATIONAL LABOR SITUATION.

Your committee having under consideration subjects referred to it, begs ave to report under the caption, "International labor relations" (pp.59–62) f the executive council's report:

We hold and declare that no movement can properly function, regardless of whether it be economic, social, or political, in the absence of free speech, free press, and the constitutional rights of the people to exercise self-government.

After all, democracy is the first essential in the lives of the peoples of all nations. No movement of any nature can properly function without freedom of action and self-government, which are inseparably associated with democracy. The trade union movement, first in importance in the economic field, is necessarily dependent on democracy in the organic form of governments. There was no real trade-union movement in Russia, nor can there be in any other country that is burdened with autocracy. Upon these fundamentals rest the successful achievements of human rights, freedom and liberty, economic, social and political justice.

Under this caption, several subjects interesting and of vital importance to our movement and to our country are set forth with accuracy and clearness, and are worthy of the fullest perusal and keenest thought. We urge all delegates and all others to carefully read all that is said on this subject. It particularly refers to the change in Russia from despotism to opportunity for freedom; the declaration of basic principles and policies of the provisional Government of Russia and the appointment of a commission by President Wilson to visit Russia on a diplomatic mission on behalf of the Government of the United States.

We note with keen interest the appointment of James Duncan, first vice president of the American Federation of Labor and president of the Granite Cutters' International Association of America, upon this important commission. We appreciate the action of President Wilson and felicitate the American people upon the wisdom of his selection. Upon this important mission full recognition was given to the trade-union movement, to the workers—the masses—and it required one who possessed an intimate basic knowledge of the rise and development of the labor movement of our country, its achievements, its hopes, and its aspirations, all of which are possessed to a remarkable degree by our esteemed fellow trade-unionist, Brother Duncan. We moreover congratulate Brother Duncan upon his selection and for the eminently successful manner in which he discharged the obligations resting upon him.

We declare that had there been a trade-union movement in Russia it would have had a stabilizing force and a far-reaching beneficent effect in the crisis now resting so heavily upon the Russian people. The Russian people have lived for centuries in one of the most brutalized autocracies that has ever disgraced the pages of history; they were denied the right of self-government, the right to congregate for any economic or political purposes, the right to attain an education, and because of these limitations there existed a lack of experience that would have been of priceless value now in stabilizing and maintaining their new-found freedom.

The trade-union movement, had it existed in Russia, would have developed discipline and a central power not of an autocratic nature, but a power rather to execute and carry into effect the democratically expressed will of the majority of the people.

We note with the greatest satisfaction the cable messages of fraternity and good will sent to the people and the provisional government of the new Russian democracy by President Gompers and by the executive council of the American Federation of Labor.

Upon the question of conferences held and proposed by the International Federation of Trade Unions and other associations, we shall have more to say under a separate caption. Suffice it at present to say we concur and recommend for indorsement the action of our officers and the executive council in connection with these important conferences.

The convention unanimously adopted the report of the committee.

PEACE TERMS.

Upon that portion of the report of the executive council under the abov caption (p. 62), your committee reports as follows:

There can be no true cooperation from an international standpoint excep where the elected and responsible representatives of the workers participat under an agreement which recognizes and safeguards the rights of each natio to fix and declare its own destiny, and yet broad enough, big enough, and i telligent enough to submerge selfishness and nonessentials to the common goo of the workers of all nations.

Peace terms should presage a condition tending to a lasting peace grounde upon conditions that are just, fair, and honorable to the peoples of all countrie

We agree with the executive council that "The government should be onl an instrumentality of the people instead of dominating and actuating thei lives," and, further, that "The terrific war must wipe out all vestiges of th old concept that the nation belongs to the ruler or government," and moreove "There is no element in all nations more concerned in the achievements of con ditions making for permanent peace between nations than the working peopl who constitute the majority of every nation. The future must be constructe upon broader lines than the past. We insist, therefore, that the Governmen of the United States provide adequate and direct representatives of wag earners among the plenipotentiaries sent to the peace congress, and urge upo the labor movements of other countries to take like action."

The executive council offers the following declaration as a basis upon whic peace should be negotiated:

1. The combination of the free peoples of the world in a common covenan for genuine and practical cooperation to secure justice and therefore pea in relations between nations.

2. Governments derive their just power from the consent of the governed.

3. No political or economic restrictions meant to benefit some nations and t cripple or embarrass others.

4. No indemnities or reprisals based upon vindictive purposes or deliberat desire to injure, but to right manifest wrongs.

5. Recognition of the rights of small nations and of the principle, "No peopl must be forced under sovereignty under which it does not wish to live."

6. No territorial changes or adjustment of power except in furtherance of th welfare of the peoples affected and in furtherance of world peace.

In addition to these basic principles, which are based upon declarations o our President of these United States, there should be incorporated in the treat that shall constitute the guide of nations in the new period and conditions in which we enter at the close of the war the following declarations, fundament to the best interests of all nations and of vital importance to wage earners:

1. No article or commodity shall be shipped or delivered in international com merce in the production of which children under the age of 16 have been em ployed or permitted to work.

2. It shall be declared that the basic workday in industry and commerce sha not exceed eight hours.

3. Involuntary servitude shall not exist except as a punishment for crim whereof the party shall have been duly convicted.

4. Establishment of trial by jury.

Your committee concurs in the foregoing with a clear understanding that is submitted as a basis upon which peace terms may be negotiated.

In addition to the peace terms which the executive council recommende in its report, the following proposal should be incorporated: The Governmen of the various nations shall exchange labor representatives, according to the the same authority and honor that is given to any other diplomat. Goverr ments have long been accustomed to exchange commercial, industrial, and fina cial representatives, and we submit that this concept ought to be widened t include not only the above-named interests but also those who furnish th human labor energies essential to coordination for production.

One of the paramount facts which clearly stands out, above all others, in thi unprecedented world war is that labor is a basic force in producing th materials of civilization and is coequal with all other essential elements i national life.

It is not only fitting that labor should be given this merited recognition, bu no other single policy would contribute more effectually to the democratizatio

of relations between nations, thereby strengthening forces and conditions that make for permanent peace based upon essential human justice.

If a labor conference is held prior to the war's close or prior to a time in which the belligerent nations are to participate in a peace conference, labor would be forced to declare specific terms presaging the conditions upon which peace should rest; this implies an inadvisable attitude not only for labor but, moreover, for our country as well. Neither American labor nor the American Government should now state the final binding terms of peace. Both, however, can be instrumental and exercise a potential force at the proper and opportune time.

This is a world war in which 17 nations are allied against the central powers. Our Government did not start this war. We should not, in the light of present events, call a peace conference or arbitrarily name inflexible peace terms. Such a responsibility rests upon our Government and is a prerogative and responsibility it should first assume and exercise.

We concur in the action of the executive council in refusing to be led into a premature peace conference, whether emanating from Germany or originating with her sympathizers here or elsewhere, and congratulate it upon its sagacious judgment in refusing to participate or becoming involved in any schemes of this character.

Conditions are changing from day to day and that which appeals to our judgment to-day as proper fundamental peace terms may be changed over night.

Genuine democracy, the great issue now in war, had no lodgment in the minds and hearts of those who started this war; neither was it an appreciable issue until made so by our entrance into the war. Other sound principles may develop, which we should like later to make one of the basic principles upon which peace should be declared.

When a peace conference is held it should be at a time and place when and where the workers of the vanquished as well as those of the triumphant countries may participate upon an equality, in order that the best interests of labor and of the trade-union movement may be fully promoted.

When victory is achieved none will be quicker to extend the fraternal hand of trade-union fellowship to the organized workers in all countries now at war, or will do so more heartily than will the American Federation of Labor.

In connection with this subject we call special attention to the November issue of the American Federationist, which contains much interesting and instructive correspondence.

The San Francisco convention of the American Federation of Labor, in adopting a part of the report of the committee on international labor relations, instructed the executive council to call a labor peace conference of all nations at the time and place the peace conference is held by the belligerent nations, and authorized the executive council to send two delegates, one of whom should be the president of the American Federation of Labor. This action was reaffirmed at the Baltimore convention in 1916.

Your committee recommends that that action be again reaffirmed with the addition that at least five delegates, one of whom shall be the president of the American Federation of Labor, be selected to participate in this conference.

AMERICAN ALLIANCE FOR LABOR AND DEMOCRACY.
280 Broadway, New York, January 4, 1919.

To the members and local branches of the American Alliance for Labor and Democracy and to the American trade-union movement:

It is fitting that upon every proper occasion the loyalty of Americans to our country and our Government should be made manifest, not as a matter of empty show but as a recurring demonstration of the solidarity of the people of our Nation in this great war.

The anniversary of the birth of Abraham Lincoln, the great emancipator, will be made the occasion of nation-wide demonstrations of patriotic unity and earnestness. This is fitting.

Because the American Alliance for Labor and Democracy was brought into being to completely unite the workers of our country in our country's cause and whose patriotic work was indorsed by the American Federation of Labor, it is proper that all join heartily in partaking of the national spirit of that day.

That we may the more thoroughly and effectively demonstrate our solidarity and our unity in behalf of our Republic, the executive council of the American Alliance for Labor and Democracy has directed that the week of Lincoln's birthday be observed as a loyalty week, and it is in pursuance of this wise decision that I hereby call upon the working people of America to participate in the observance of the week beginning Sunday, February 10, as LABOR LOYALTY WEEK, for the purpose of demonstrating labor's intense loyalty to America, for the purpose of increasing and intensifying that loyalty.

It is requested that all local branches of the American Alliance for Labor and Democracy in cooperation with all local bodies of organized labor, arrange and hold mass meetings and demonstrations on Lincoln's birthday, Tuesday, February 12, 1918. And that they distribute patriotic literature and make use of every opportunity to spread the inspiring message of America's aims and ideals among their fellow workers and other fellow citizens.

Organized workers in communities where there is no local branch of the American Alliance for Labor and Democracy should take upon themselves the duty of arranging mass meetings and demonstrations for loyalty week, and particularly on Lincoln's birthday, to the end that the workers in such communities may not be deprived of the inspiration of such demonstrations, and to the further end that branches of the alliance may be organized for the permanent work of combating the insidious forces of pro-German anti-American propaganda.

Let us on the anniversary of the birth of this great and noble American—the great liberator, Lincoln—rally the forces of freedom that they may do their full part for the triumphant world struggle of to-day, so that justice, freedom, and democracy shall survive and become world wide as guiding rules of all peoples and all nations as well as in international relations. And thus making for a permanent peace and for universal brotherhood.

Fraternally,

SAMUEL GOMPERS,
President American Alliance for Labor and Democracy.

AMERICAN FEDERATION OF LABOR,
Washington, D. C., January 1, 1918

To all organized labor, greeting:

DEAR SIRS AND BROTHERS: January, 1918, dawns at a time of great opportunity for labor, which presents at the same time corresponding responsibility and duty.

Our Republic, our people are at war. Whatever individuals may have thought upon the European situation before the Congress of the United States declared war against the Imperial German and Austrian Governments that must now be laid aside. The Congress and the President, under the authority of the Constitution of our Republic, have irrevocably decided the matter.

War means victory for our cause or danger to the very existence of our Nation.

With our Nation at stake individuals can not interpose opposition to the war—a war declared by the will of the Nation's representatives.

Under the exigencies of war, opposition to the war declared by constituted authority becomes treason.

It is a time that requires serious consideration of words and actions.

While this is true, there is even more than ordinary need for the maintenance of the rights of men and women, and for careful scrutiny and the fullest discussion of policies and methods before their adoption.

The time for labor to interpose its needs and contentions is while policies are in the making.

The world war in which we are engaged is on such a tremendous scale, and is so all-pervading in its influences and effects, that we are readjusting practically the whole Nation's social and economic organization from a peace to a war basis.

For labor this readjustment is a very critical period.

If, in the process of readjustment, fundamental principles of human freedom and welfare are not maintained, the whole purpose and spirit of our Government and our social institutions may be perverted.

It devolves upon liberty-loving citizens, and particularly the workers of this country, to see to it that the spirit and methods of democracy are maintained

in our own country while we are engaged in a war to establish them in rnational relations.

he fighting and the concrete issues of the war are so far removed from the ple of our country that not all of our citizens have a full understanding of issues involved. An understanding of the principles of autocratic force, ch the central powers desire to substitute for the real principles of freedom, tes clear to all citizens of this Republic the effect of our possible defeat n their own lives and activities.

'o prevent the possibility of autocratic forces winning in this world conflict eel that it is the duty of the officers, the representatives, and organizers of American labor movement to do everything within their power to make it in to the rank and file and citizenship of this country what is involved in e war, as well as the obligation that devolves upon all citizens. In the ruggle there is not an element that constitutes the Nation but has a part al an influence, and will either support the Government or will hinder the onduct of the war.

In addition to the fundamental principles at issue, labor has an additional nterest in the war. This war is in the last analysis a people's war—labor's ar. The final outcome will be determined in the factories, the mills, the shops, he mines, the farms, the industries, and the transportation agencies of the arious countries. That group of countries which can most successfully organize its agencies of production and transportation, and which can furnish the nost adequate and effective agencies with which to conduct the war will win.

The workers have a part in this war coequal with the soldiers and sailors n the ships and in the trenches.

Continuous production is an indispensable prerequisite to production of necessary war supplies. The Government, as well as the workers themselves, is vitally interested in maintaining such conditions that there shall be no occasion for interruption in production.

The chief responsible agents of the Government have shown a desire to be fair and an understanding of the human elements involved in this problem. The organized-labor movement has also shown an equally broad understanding and grasp of the situation.

Even before war was declared representatives of the labor organizations of the country met in Washington on March 12, 1917, and adopted a declaration known as "American Labor's Position in Peace and in War."

On the basis contained in that declaration, agreements have been made between the Government and the trade-unions. This work was reported to the American Federation of Labor's Buffalo convention, which approved it and recommended that the course be continued. In addition to that action, the Buffalo convention adopted the following declaration as the position which labor should take in all such matters:

"The following principles and policies should be observed by all boards or commissions of a government character appointed by the Government or otherwise during the duration of the war:

"The industrial problems arising through our Nation's participation in the war and the agencies in operation to preserve industrial peace and establish an adequate degree of cooperation between the employer, whether private or governmental, and the employee, has created a condition which makes it essential that certain conditions and principles shall be clearly kept in mind and generally accepted. If justice is to be done and terms of employment and conditions of labor equitable to the employer and employee established, certain broad principles must be applied.

"In determining what the wage rates should be there are several vital factors to be considered apart from the increased cost of living.

"The existing wage rate in an establishment should first be considered as to its equity.

"Was it established as a result of joint conference and agreement between the employer and his employees, or was it established as a result of the employer's individual conception of what wages should be paid to those in his employ?

"To what degree did the previous wage rate compare with those in establishments in the same district where wages have been established through joint agreement between the employer and the employee?

"How did the wage rate adopted through joint agreement in the district compare with the wage rates in other districts where joint wage agreement existed?

"In the composition of boards or commisisons which are to consider questions of terms of employment and conditions of labor, it is essential that there should be equality of representation between the employers and the wage earners.

"In the event that a wage board or commission is to consist of an unequal number, then a civilian should serve as the odd man. One-half of the remaining number of this body should be the direct representatives of the wage earners to be nominated by organized labor.

"The right to organize is essential to the solution of problems arising between employer and employee. Employers apply this right, but in many instances this right has been denied to wage earners by employers. All agreements formulated by wage boards or commissions should contain a clause announcing that the right to organize is inalienable and that prevention of the exercise of this right by the employer or his representative constitutes a violation of these principles.

"The Nation's interest makes it essential that cooperation should exist in the industries. No efficient cooperation can exist except through organization. Cooperation presumes good will and these can be no good will without recognition of mutual rights. Therefore the recognition of the employees as a group having common interests is one of the fundamental prerequisites to cooperation.

"There can be no true efficiency in production without good will. Good will and cooperation can not exist where the employer exercises autocratic authority in determining the terms of employment and the conditions of labor. The highest efficiency in production can only be secured through the application of the principles of democracy. These are as essential in industry as they are in civil government.

"Whenever the employees in a department or an establishment have a common complaint or grievance, it is fundamental that the employer should meet those who may be selected by the workers to represent them.

"It is advisable that production should not cease because of an apparent injustice or oversight contained in an award, for it is necessary to the Nation's protection as well as to the welfare of the trade-union movement that there should be no cessation of work except as a last resort."

It is difficult to conceive a more serious responsibility than that which rests upon the organized labor movement of our country, its responsible officers, and upon the great rank and file representatives.

Upon you and upon all rests the duty of maintaining the rights and interests of the workers of our Republic, at the same time doing everything within the power of all to further the interests of the Government in the urgent needs that arise out of the conduct of a world-wide war.

Representatives of the labor movement must undertake the work of organization with greater seriousness and intensity than ever before. Organization is the corner stone upon which workers must base all of their plans, upon which the Government itself must rest its labor policies, upon which all can serve in a triumph for justice, for freedom, and for world democracy.

I feel it incumbent upon me at the beginning of this New Year to present to you thus at length the seriousness of the situation that confronts labor and the importance of the work that lies immediately ahead of us. Yet this very serious and critical situation is accompanied by a great hope, the hope that the spirit of self-sacrificing devotion to purpose and high conception of service that have grown out of this war may bring about a new world of life and work that the peoples of all countries may live under the beneficent influences of the principles of new freedom and democracy in every relation of life.

It is most appropriate that we should all be reminded of our immediate duty. Nothing can contribute more to that purpose than to restate the declarations of the March 12 labor conference, from which I quote the closing paragraphs as follows:

"The present war discloses the struggle between the institutions of democracy and those of autocracy. As a Nation we should profit from the experiences of other nations. Democracy can not be established by patches upon an autocratic system. The foundations of civilized intercourse between individuals must be organized upon principles of democracy and scientific principles of human welfare. Then a national structure can be perfected in harmony with humanitarian idealism—a structure that will stand the tests of the necessities of peace or war.

"We, the officers of the national and international trade-unions of America in national conference assembled, in the Capital of our Nation, hereby pledge

urselves in peace or in war, in stress or in storm, to stand unreservedly by the tandards of liberty and the safety and preservation of the institutions and leals of our Republic.

"In this solemn hour of our Nation's life, it is our earnest hope that our Republic may be safeguarded in its unswerving desire for peace, that our people nay be spared the horrors and the burdens of war, that they may have the opportunty to cultivate and develop the arts of peace, human brotherhood, and a higher civilization.

"But despite all our endeavors and hopes, should our country be drawn into the maelstrom of the European conflict, we, with these ideals of liberty and justice herein declared, as the indispensable basis for national policies, offer our services to our country in every field of activity to defend, safeguard, and preserve the Republic of the United States of America against its enemies whomsoever they may be, and we call upon our fellow workers and fellow citizens in the holy name of labor, justice, freedom, and humanity to devotedly and patriotically give like service."

We were forced into the war.

We are in the war.

"Eternal vigilance is the price of liberty."

"Now is the time that tries men's souls."

Fraternally, yours,

SAML. GOMPERS,
President American Federation of Labor.

Mr. GOMPERS. There is one suggestion I have to make—and I think the gentleman who will follow me and whom I urge you to hear will agree to—that we believe it were better rather than to take the statements of employers who have appeared before you, or who have written to you or communicated with you in some other form, or of those who have been always hostile to anything we presented and always have tried to put us in the very worst light—rather than to take my word, rather than take the word of the men who are to present the evidence to you, that you appoint a committee or a commission to make an investigation in the shipyards. We ask that if such a committee or commission is appointed that a representative of labor may be appointed a member thereof, so that he may help and be where any word is spoken upon the subject, where any information is given, that he may be led to where any information exists, and that he may help in leading wherever other information is available, and that the committee be given two weeks. In that time you can have a report before your committee of a comprehensive character and the whole truth will be known to you.

Senator NELSON. Mr. Gompers, if you will allow me—we have in one form or another been given to understand, and on that there is no disagreement—that it is of the utmost importance to expedite our shipbuilding, to expedite it more than it has been expedited heretofore, and that the great problem in connection with expediting that shipbuilding is the question of labor, mobilizing labor and makng it as efficent as possible to carry on the shipbuilding program, and it is on that point that I, for one—speaking for myself—would like information. I am intensely in favor of the war; I want to expedite the shipbuilding program as much as possible, and I want to know how we can expedite it, and whether what I call "labor"—and I refer to all kinds of labor, organized and unorganized—can do to help us to expedite it, and I should be very glad for you and these other men to enlighten us on that point. I have no quarrel with abor, you understand, but I am anxious to see that the great work we re now engaged in should progress as rapidly as possible.

Mr. GOMPERS. Senator, I may say this for my associates, and for the gentlemen who are going to submit testimony to you of an important character, and from the rank and file, we are with the Government of the United States and the allied countries for a fight to a finish, and nothing will suit us unless it be a fight to a finish; and if democracy and free institutions are to go down, let them go down in a fight, but not by intrigue or by slacking on the part of any man We are with the Government of the United States, the Republic of the United States is dear to us, as dear as it can be to any man or woman on the earth, and we are going to give the best that is in us that the cause in which we are engaged shall come out triumphantly That is our position.

Senator NELSON. I am glad to hear you say so, and I have never doubted but what that has been your position all along.

Senator HARDING. Mr. Gompers, before you leave: The general trend of the testimony here—which is not always unfriendly disposed, but in commenting on the labor situation, has shown apparently a disposition to have a decrease of effort in exactly the proportion of the increase of pay. In other words, if I state it more clearly a number of the western shipbuilders have testified that the enormous increase of wage has materially reduced the working time of the men. Do you know anything concerning that?

Mr. GOMPERS. I do not, sir. My information is that it is not so.

Senator HARDING. Has the effort to unionize the working forces of the country in this emergency countenance on the part of labor leadership?

Mr. GOMPERS. In some quarters there has been insistence of this character, that labor is giving its full support to the Government of the United States in the prosecution of the war. They say—and there are only a few instances—we have, say, 90 per cent of the workers of this industry enrolled in membership in our organization There is not any agency that you can discover that could be so effective in furnishing the men where you want them. For instance, let me say, the Brotherhood of Carpenters and Joiners of America—I regret very much that I have not a copy of the last issue of their official journal, in which there is a letter addressed to the carpenters of America, urging them to fill out the blank of the opposite page of the journal, it being blank on the reverse side of this printed part—the name, character of work in the woodworking industry, carpenters, ship carpenters, calkers, address, willingness to accept position where will be assigned on Government work, and so on.

The president of that organization informed me that the names and addresses of fully 30,000 men willing to go anywhere they may be wanted have been received. His position is this: He said, "Now, we are cooperating with the Government. We will, upon application furnish any number of men. We will furnish union carpenters; if we can not do that, we will furnish nonunion carpenters. We will furnish carpenters or ship calkers, or shipwrights, or what not." But he feels that at least that organization ought to have an opportunity of furnishing the workers as they are required. I do not know of any other instance——

Senator HARDING (interposing). Do you mean by that that no others ought to be employed except through him?

Mr. GOMPERS. He will furnish the list of the names and furnish the men.

Senator HARDING. That is essential.

Mr. GOMPERS. That is his feeling about it. I do not know of any instances. I am telling you of one I know.

Senator HARDING. Most of the shipyards are union yards, are they not?

Mr. GOMPERS. Most of them.

Senator HARDING. Some are closed shops?

Mr. GOMPERS. If you will pardon me, I do not know of any such term. I do not know what that term means.

Senator HARDING. I am using a common expression.

Mr. GOMPERS. No; it is common only as antagonism to the union shops.

Senator HARDING. Then, I will use a more agreeable term, if you will give it to me—the exclusively union yard.

Mr. GOMPERS. The union shop.

Senator HARDING. Have you any information as to the relative efficiency of the union and nonunion and the so-called "mixed shop"?

Mr. GOMPERS. My information is that the union shop is the most effective and efficient.

There is something I omitted to say—I am sorry at this late time and stage of the proceedings it comes to me, and that it did not come to me before—and that is the question of averages and efficiency. There has been a draft of unskilled workmen to the shipbuilding industries, men who may have been competent and skilled workmen in other trades, and callings, but who are not competent shipwrights, riveters, calkers, and so on, and that when any estimates is made of the efficiency of the yard, certainly the comparative efficiency of the new men in the industry, with the practical men who were employed before the skilled workmen is made, is not fair. And, then again, when some of the efficient men are placed in charge of one or two other men, who have not the experience and skill, that it necessarily lessens their productivity, and that these things must be taken into consideration.

Senator HARDING. Could there be anything or has there been anything accomplished by special unions endeavoring to expedite the program?

Mr. GOMPERS. Yes, sir.

Senator HARDING. I think it is fair to state that.

Mr. GOMPERS. In every way. In that declaration to which I referred as having been adopted March 12, 1917, a month prior to our entrance into the war, the declaration of this conference which was adopted and ratified by the convention of the American Federation of Labor, and by all other organizations, it says:

But, despite all our endeavors and hopes, should our country be drawn into the maelstrom of the European conflict, we, with these ideals of liberty and justice herein declared, as the indispensable basis for national policies, offer our services to our country in every field of activity to defend, safeguard, and preserve the Republic of the United States of America against its enemies whomsoever they may be, and we call upon our fellow workers and fellow citizens in the holy name of labor, justice, freedom, and humanity to devotedly and patriotically give like service.

Senator HARDING. That was the utterance of the convention?

Mr. GOMPERS. Yes, sir.

Senator HARDING. And if this question is not pertinent, we will have it withdrawn: I have seen many important patriotic utterances from you. It has been said that your utterances are not always accepted by the district officials. Have you encountered that lack of harmony?

Mr. GOMPERS. I am not Sir Oracle. No one accepts what I say except he believes that it is the right thing. The great, vast number of the workers of America accept me, my utterances, and desires, and recommendations. There are some who do not. 'Tis pity, 'tis true that even that exists to about the same ratio as with respect to our great President of the United States. There are some people in the United States with whom his utterances go for naught.

Senator HARDING. I think it fair to have it brought out, in view of all that has been said, if that is the situation.

Mr. GOMPERS. I think the great mass of the people of the United States are behind the President of the United States and the Government of the United States. I know that there are some who do not follow that line and who do not yield their individual judgment, and that is—I wanted to say "unfortunately" true, but I do not know whether I am justified in saying that—it is regretably true that there are some workers who do not believe in me who think and who say that I have sold out to this capitalistic Government of ours.

Senator HARDING. I would not think they would gather that impression from your testimony here to-day.

Mr. GOMPERS. When people are engaged in a system of propaganda for the purpose of accomplishing a given point they are not entirely scrupulous as to the methods they employ.

Senator HARDING. Since we are on that subject, how much of the embarrassment in the labor field is due to German propaganda?

Mr. GOMPERS. It is difficult to point out exactly, but I have not the slightest doubt that it is so, and perhaps it might not be uninteresting to delve a bit into that subject.

Senator HARDING. It would not be.

Mr. GOMPERS. Out of my 68 years of life I have been a pacifist more than 55 years, and before that I did not know anything about it. I belong to nearly every local, national, and international peace society, and I think I was about as willing to go any length that any pacifist who ever existed would go to prevent an international break, an international war. But when the war broke out in Europe and I found that men who had pledged themselves to each other, to the workers of the civilized world, that under no circumstances would they tolerate, so far as they could help, the breaking of the international peace—when I found they responded to the autocracy and were clutching at the throats of those to whom they pledged their word, honor, and faith, and life, when I found that the masses of the German people responded to the colors and followed the Kaiser's directions and the autocracy and the imperialism of Germany, I was shocked as in my life I never was before, and I doubt whether it is possible for me at any time hereafter in my life to be. I was in really a lachrymose condition. I could not understand it. I was

dazed. And then after a while I came to myself and to an understanding of what this all meant.

So long as the German arms were victorious and unimpeded in heir movements, unchecked, there was no such thing as a German ropaganda for interference in the internal affairs of other countries. heir military program was being carried out; their plans were aparently successful. When they were checked, that was not written i their program. and that to them meant the beginning of the end. ermany was then at the height of her military power, and to be ecked spelled her ultimate defeat. When that dawned upon them nd victory was out of the reckoning, the emissaries which they had tablished in all countries for German propaganda and for the inlcation of "German kultur" and German science and German effiency were invoked. It was about that time or shortly after when ere was shown an active propaganda. At that time an organizaon was being formed, and into which I was invited to come, and hich resulted in an organization known as the National Labor Peace ouncil, and which I declined to join and induced a number of men ot to join, and some who did join to withdraw, for I foresaw not nly an unenviable ending but the smirching of the characters of en who had been regarded theretofore as above suspicion. I succeeded—not alone—you will understand if at any time I say "I did" do not want you to get the idea I did it. I mean we; I do not want o assume the editorial function while I am here—we succeeded in illing that organization.

Another organization was formed under the tutelage of John Brisbane Walker, who had been very near the line of impoverishnent, but suddenly flourished out with a newspaper all his own, a eekly. The National Peace Council held a great demonstration in Chicago on Labor Day of 1915. I had some little controversy with Mr. Walker, and we finally succeeded in driving that organization out of existence.

In 1917 they began more active movements. The Socialistic Party called a special convention to be held at St. Louis and there dopted a resolution setting forth its opposition to the war and of he selective draft, of the entire policy of the Government. The inority of those who were participants in that convention protested and finally withdrew from their party because of its—as hey style it—"treasonable course of the party toward the Governnent of the United States." A little time subsequently the forces f that party and its agencies set up a propaganda, particularly n and around New York, and they finally called a conference, which as held, I think, on June 29. I called before that contemplated eeting before the organized-labor body of New York City, the entral Federated Union, and called attention to these people who ere undertaking to speak in the name of labor on the attitude of bor toward the Government. I took a long time in making myself ear, but I was very well received, and, cutting it as short as I can, e executive board at its meeting reported to that central body at s following meeting a resolution declaring its confidence in Presint Gompers and the American Federation of Labor and its course, policy, and declaring its cooperation with the federation and yself for the purpose of a more thorough Americanization of the or movement of New York and vicinity.

A conference of that Socialist Party and these side workers in New York took me particularly and severely to task and denounced me roundly to the effect that I had sold the interest of labor and the rights of labor to the capitalists of the country and to the Government of the United States, which was capitalistic anyway, etc. When they had adjourned I was informed officially of the action of the New York Central Federated Union, and I called for the committee which they had appointed for the purpose of cooperating with me to hold a conference. The conference was held, and after discussion we decided to call a larger conference, and for five or six weeks we held one or two conferences a week and extending them to larger numbers each time. When this body of Socialists and others had determined to raise money, a large fund, and were sending out their people to organize local branches they decided to hold a conference in Minneapolis in September, and I then decided that the course that we should pursue would be to hold a convention of loyal American workers and those who broke away from the Socialist Party because of its disloyalty to the country, to be held at Minneapolis on September 5, I think it was. That convention was held. I should say that, much to my regret, the governor of Minnesota ordered that these people could not hold their convention in Minnesota. My purpose was to hold our convention at the same place, thinking that the psychology demanded that we should meet there and meet them. But we held our meeting and there we organized the American Alliance for Labor and Democracy. We have conducted a campaign of education among the workers of America, and if we have not killed the so-called People's Council we have certainly driven it under cover. They are not dead, and they are trying to influence our loyal workers by every maneuver within their power.

There exists the so-called Industrial Workers of the World, the I. W. W.'s. Before the war its secretary, upon the stand before the United States Industrial Commission, of which Hon. Frank P. Walsh was chairman, testified that the membership of the organization all over the country was less than 11,000. I am confident that that organization has a larger membership now. It has drawn to it—well, the ultra pacifists, some of them who are really honest: the pro-Germans, the anti-Americans, the devil-may-care people, and what-not. The I. W. W. policy is to make the holding of property and the conducting of business unprofitable and therefore untenable and therefore unnecessary to hold, and then hand it over to them, or as they say, "for the workers." Agreement by them with employers is out of the question. They would not enter into an agreement with employers, even where they have any considerable numbers. They will present demands and then go to work if the demands are conceded, but they do not regard that even the concessions of such demands is at all obligatory upon them to carry out the conditions of labor for any period of time. If in a month or six months or a week or a day or the next hour after returning to work, they feel perfectly free to again present other demands, or, if necessary, the yielding of the establishment or factory. It is iconoclastic; it is destructive, believing that in a general cataclysm they would control. In the carrying out of such a program it is easily discernible that it matters little

to them who will support them, who will contribute toward them, who will furnish financial means to them. I was informed, for instance, that there was a man out in Canada who was deported from that country because of his pro-German activities and propaganda there. He went to the far West and there was a very active member of the I. W. W.'s.

I may say this, in coming back to the Socialist Party itself: It is issuing circulars, conducting a campaign, and an active campaign. They want to raise $1,000,000, and they say they want to have a large delegation of Congressmen in the next Congress, and they want to poll—and they are confident they can poll—4,000,000 votes at the coming congressional election. The Socialist Party is made up somewhat as follows: There are the German group of Socialists, there are the Austrian group of Socialist, the Hungarian group, the Finnish group, the Swedish group, and so on. There are eight groups of them, and each of these groups has a secretary at the headquarters of the party. Then there is a representative of America's Socialists, and he is elected by the membership of all these groups: the present secretary of the Socialist Party, being the representative of the American Socialists, is Adolph Germer, a German.

Senator JONES. Do you know whether he is a naturalized citizen or not?

Mr. GOMPERS. I do not know, sir.

Senator SHERMAN. He must be: he was a candidate for Senator. He lives in Chicago.

Mr. GOMPERS. Yes: he lives in Chicago now. I have known some candidates for public office who have not been naturalized, but I think it fair to assume that he is a naturalized citizen. But I want to call your attention to the make-up of that party. The propaganda of anti-Americanism and pro-Germanism is quite prominent.

Senator HARDING. How do you encounter [illegible] Do you find them in your organization trying to [illegible]

Mr. GOMPERS. Only a very, very small part. I think that [illegible] using the language of the street. [illegible] qualifications in our Americanism [illegible] America.

Senator HARDING. In other words, you mean [illegible] mosphere?

Mr. GOMPERS. Yes, sir. I may [illegible] the American Federation of Labor [illegible] the patriotic action of the [illegible] racy, of which I was [illegible] antagonists, a few [illegible] question was about [illegible] voting was in [illegible] sented by delegates. There was [illegible] the constituency [illegible] represented over [illegible] and I think it was [illegible]

Senator VARDAMAN. [illegible] strength of the Socialist Party [illegible]

Mr. GOMPERS. They [illegible] bers. In the meantime, [illegible]

are asked that we should not be suffered to bear the tyranny of industrial autocracy at home. Our work is constructive and helpful. and we do not want the manhood and womanhood of America to be weakened or dissipated while we are fighting for freedom and democracy in another field.

Senator RANSDELL. Are there any further questions to Mr. Gompers, gentlemen? Are there any other points you wish to bring out now, Mr. Gompers?

Mr. GOMPERS. I think my last words ought to be to urge the appointment of a committee or a commission to examine the shipyards of the country. Just two or three types will be all that is necessary.

Senator RANSDELL. You would not think it necessary to send this commission all the way out to the Pacific coast?

Mr. GOMPERS. I think it would be necessary to go there. It would not take more than five days, three days there and five days returning. That would do the job.

Senator JONES. The Pacific coast is a very important section in this matter.

Senator RANSDELL. The reason I asked the question was that Mr. Gompers said we could do it in two weeks. I do not think such a committee could examine the Atlantic coast shipyards and then examine the Pacific coast shipyards and make a report in two weeks.

Mr. GOMPERS. I think that a committee of that character could do the job in one day at Seattle, one day at San Francisco, and one day in Los Angeles, come right back to the eastern ports and examine them in two or three days.

Senator RANSDELL. And probably get a report within three weeks, because it takes a little time to write these reports.

Mr. GOMPERS. It does not matter if you call a few men in our work.

Senator RANSDELL. How large a committee would you consider was desirable?

Mr. GOMPERS. I should say a committee of three or five.

Senator JONES. Do you have in mind a Senate committee or a committee composed of outside people?

Mr. GOMPERS. Just as your own judgment would warrant. Gentlemen, there are here Mr. Joseph Franklin, president of the Boilermakers and Iron Shipbuilders, and Mr. Franklin can in turn introduce the others.

Senator RANSDELL. Thank you very much, Mr. Gompers. In order to facilitate matters, we will first hear Mr. Black and then afterwards Mr. Franklin and his associates. Please state your name, size occupation, and residence.

STATEMENT OF LIEUT. COL. CHARLES N. BLACK, ORDNANCE DEPARTMENT, NATIONAL ARMY.

Col. BLACK. My name is Charles N. Black, lieutenant colonel in the Ordnance Department, National Army. Prior to three weeks ago I was a resident of New York City, a member of the firm of Ford, Baker & Davis, Engineers.

Senator RANSDELL. Senator Johnson, will you conduct the examination of Col. Black?

, yes, sir.

or JOHNSON. With whom were your negotiations conducted?

BLACK. The gentleman's name?

or JOHNSON. Yes, sir.

BLACK. A Mr. Stevens and Mr. Hayes.

or JOHNSON. They represented whom, if you know, or what?

BLACK. Mr. Stevens represented the American International als Corporation; I believe he was vice president.

or JOHNSON. The American International Terminals Cor- n?

BLACK. Terminals Corporation.

or JOHNSON. Do you know whether or not it was a subsidiary tion?

BLACK. So I understood.

or JOHNSON. Did you consummate your negotiations in the n of any contract or option?

BLACK. I did.

or JOHNSON. And that option was executed by you to whom?

BLACK. The option was executed to the American International Terminals Corporation—there were two options, one for the which I had an undivided interest, and the other for an n land which stood in my name. The first option was exe- the American International Terminals Corporation.

or JOHNSON. Date?

BLACK. June 14, I believe.

or JOHNSON. The price per acre, please?

Two thousand dollars.

NSON. And the other option was executed to whom?

I am not positive whether it was to the American Corporation direct or the American International

Senator JOHNSON. Were there any others you dealt with except the gentlemen whom you have named?

Col. BLACK. In connection with this particular sale?

Senator JOHNSON. Yes, sir.

Col. BLACK. There were other gentlemen whom I met, a number of men connected with the American International Corporation, before the sale was actually consummated.

Senator NELSON. You stated a moment ago that as to 500 and some acres, it stood in your name. Was it not your own property, or did you have anybody else interested in it with you?

Col. BLACK. I had a contract with my brother and with my sister when I took title to this property, to give them——

Senator NELSON. Where did they acquire it? Had they got title to it then?

Colonel BLACK. The property has been in my family for probably 100 years, and it came to us through descent.

Senator NELSON. You had a contract with them?

Col. BLACK. I had a contract with them, a personal contract.

Senator NELSON. And nobody in this American International Corporation or its subsidiaries had any interest in it?

Col. BLACK. None whatever?

Senator NELSON. Who were the coowners with you in that part that you said you had a limited interest in?

Col. BLACK. F. H. Bohlen represented the owners; who they were I do not know fully.

Senator NELSON. Who is Mr. Bohlen?

Col. BLACK. F. H. Bohlen; he is a lawyer in Philadelphia, and I believe has testified before the committee.

Senator JOHNSON. Yes; he did.

Senator NELSON. That is all, Senator Johnson.

Senator JOHNSON. Now, at the time of the execution of these options were there any outstanding options or contracts for the sale of that property by you?

Col. BLACK. Not of the property in question. There was some adjacent property which we had just negotiated the sale of—60 acres.

Senator JOHNSON. That was sold to the Westinghouse people.

Col. BLACK. No; that was sold to E. F. Henson, a lumber man in Philadelphia.

Senator JOHNSON. Were there any outstanding contracts or options upon any part of this particular property that was conveyed by you to the American International or its subsidiary corporations?

Col. BLACK. None at all.

Senator JOHNSON. Had there been, prior to this time, any options or contracts outstanding?

Col. BLACK. We have had in the past 20 years two or three.

Senator JOHNSON. Well, say immediately prior.

Col. BLACK. We had an option out about a year before.

Senator JOHNSON. And the price of the land in that option was what?

Col. BLACK. Approximately $1,000; it was not specified accurately per acre.

Senator JOHNSON. Do you know when that particular option for $1,000 expired?

Col. BLACK. It expired—I think it was in February or March.

Senator JOHNSON. 1917.

Col. BLACK. Yes.

Senator JOHNSON. Do you know why the option was taken in the ame of the subsidiary corporation, the American International Terminals, as you have described?

Col. BLACK. No: I have no idea.

Senator JOHNSON. Were any reasons given to you at any time in hat regard?

Col. BLACK. No, sir.

Senator JOHNSON. Were any individuals connected with that particular corporation or with any corporation then paid any commission?

Col. BLACK. None that I know of.

Senator NELSON. Have you really deeded the property to this corporation?

Col. BLACK. Yes, sir.

Senator NELSON. When.

Col. BLACK. I think it was in September—about the 13th or 14th f September.

Senator NELSON. The entire interest of yourself and your family n this property?

Col. BLACK. Yes, sir.

Senator JOHNSON. To whom was your deed executed?

Col. BLACK. The American International Corporation.

Senator JOHNSON. Why? Were there some transfers from the American International Terminals to the [illegible] to the American International Corporation?

Col. BLACK. That I can not answer.

Senator JOHNSON. Was the whole purchase price paid at the execution of the deed?

Col. BLACK. With the exception of the sum of [illegible] there was a question of title which I agreed to pay [illegible] that question could be legally determined.

Senator JOHNSON. Is that in escrow to-day?

Col. BLACK. It is in escrow to-day.

Senator JOHNSON. The title has not been [illegible]

Col. BLACK. The title has not been perfected [illegible] of accretions.

Senator JOHNSON. Then with the exception of [illegible] price of [illegible] per acre has been paid [illegible] with you in the property?

Col. BLACK. Yes.

Senator JOHNSON. The title [illegible]

Col. BLACK. It was.

Senator JOHNSON. With which

Col. BLACK. The [illegible] Philadelphia.

Senator JOHNSON. The [illegible] you please?

Col. BLACK. The only [illegible] that I met was a Mr. [illegible] pre

Senator JOHNSON. [illegible] appr the property at the time of the disturbance?

Col. BLACK. I do not know whether he did.

Senator JOHNSON. Did you?

Col. BLACK. Oh, I had had my ideas of the value of the property for a great many years. I consulted with some real estate agents, but I was thoroughly familiar with values in that vicinity myself.

Senator JOHNSON. Do you know whether he obtained from any real estate men appraisals of value at the time the insurance was perfected?

Col. BLACK. That I had not personal knowledge of.

Senator JOHNSON. You are not familiar with that at all?

Col. BLACK. No, sir.

Senator NELSON. Are you employed now by the Government?

Col. BLACK. I am.

Senator NELSON. In what capacity?

Col. BLACK. I am on Col. McRoberts's staff, in the Ordnance Department.

Senator NELSON. Here in Washington?

Col. BLACK. In Washington.

Senator NELSON. You have no connection with any shipyard?

Col. BLACK. None whatever.

Senator NELSON. You are a civilian that has lately been appointed to the Army?

Col. BLACK. Yes.

Senator JOHNSON. That is all, sir.

Col. BLACK. I should like to make one statement, if I may.

In connection with the sale to Mr. Henson—which was made at price of $2,000 an acre, and which was consummated before there was any inquiry from the American International Corporation or any other concern in any way, shape, or form connected with shipbuilding—the agreement of sale being completed in March of this past year, and after Mr. Henson had made an exhaustive study of the water front in and around Philadelphia. He is a man who has been in the lumber business a number of years and, I understand, is one of the largest lumber dealers in Philadelphia. He purchased that property for the development of his business. There were other properties available, but he considered that that price of $2,000 per acre was the most reasonable one for property with deep-water frontage that he could find in or around Philadelphia. And I know that just north of League Island—this property is located just south of League Island; I have a map if the committee cares to look it over.

Senator RANSDELL. League Island is where the navy yard is?

Col. BLACK. Yes. At Greenwich Point the property is held at anywhere from $4,000 to $10,000 an acre, and it has a great disadvantage from a shipping standpoint in that it requires all vessels going up the river or down the river to reach the ocean to pass around what is known as Horseshoe Curve, which in wintertime is frequently jammed with ice and almost impassable, and at all times considered by shipping men, so I am informed, as a rather dangerous point of navigation in the river. I simply make this statement to show that the price we finally asked the American International Corporation was what we considered a very low price, because half of the land they purchased had been raised 10 feet above low water, while the land sold to Mr. Henson was on the average not more than 3 or 4 feet above low water.

Senator RANSDELL. When was it raised?

Col. BLACK. It has been raised during the past 20 years at various mes.

Senator RANSDELL. Had it already been raised when you gave this ption of $1,000 an acre?

Col. BLACK. It had; yes; but after the expiration of this option I ade another contract with the American Dredging Co. to fill in the ıtire balance of the property.

Senator JOHNSON. Do you know Mr. Dallam, a real estate agent in hiladelphia?

Col. BLACK. I do.

Senator JOHNSON. I had not intended to go into this subject with ɔu, but inasmuch as you have spoken of the value, I will ask this ıestion. Do you know the property that he has purchased adjoining ɔur property—the Scott property?

Col. BLACK. I do.

Senator JOHNSON. Do you know that he paid $350 an acre for it?

Col. BLACK. No.

Senator JOHNSON. Do you know what price he paid for it?

Col. BLACK. No.

Senator JOHNSON. Do you know that he has purchased property ll about the particular property that [illegible] to the American International?

Col. BLACK. That is property of a [illegible] I know nothing about such purchases.

Senator JOHNSON. Are you fa[illegible] paid?

Col. BLACK. No, sir; I know [illegible] I sold to the Philadelphia, [illegible] acres of my property, before [illegible] an acre; and that [illegible] and the price first [illegible] and it was only [illegible] the property that I [illegible] acre. And when [illegible] to our agents, [illegible] sell another [illegible]

I want to say that [illegible] all was the fact that [illegible] very uniform [illegible] ago, with [illegible] and I knew [illegible] harmony between [illegible]

Further [illegible] around the [illegible] there was [illegible] between the [illegible] land that [illegible] and all other [illegible] Delaware [illegible] be dredged [illegible] prices in or around [illegible] value of the [illegible] nately [illegible]

Furthermore, about 370 acres of this land had been filled and raised an average of 10 feet above low water, and the balance could readily be raised at a moderate cost. Very little of the other land around there can be filled in, except at enormous expense. This land could be filled in, and we have the mud and sand right there convenient to fill it in. And, as I say, the American Dredging Co., just prior to my negotiations with the American International, had entered into an agreement with me to fill all of the balance of the land standing in my name.

Senator JOHNSON. The date of your option that you entered into with the American International Terminals Co. was May?

Col. BLACK. June 14. The first option was June 14, and the second was June 20.

Senator JOHNSON. And your third option, for $1,000 an acre, expired in March?

Col. BLACK. In February or March; I am not quite sure about that, Senator.

Senator JOHNSON. Well, between February and June did the land increase in value $1,000 an acre?

Col. BLACK. Oh, no; I tried my best to get them not to take that third option.

Senator JOHNSON. Do you know whether Mr. Dallam asked for an appraisement of this land subsequent to your sale?

Col. BLACK. No.

Senator JOHNSON. Do you know that he made an appraisement of the maximum sum?

Col. BLACK. No; I do not. I received an appraisement from Harbert & Claghorn, and they considered that the price was reasonable.

Senator RANSDELL. Colonel, I would like you to state briefly just what caused that land to go up so much in value in that brief period of time.

Col. BLACK. I considered the price we made before was ridiculous. It was made only because of the great desire of Mr. Bohlen to clear up that divided interest, and that could not be done without my including the other land.

Senator JOHNSON. As a matter of curiosity, Colonel, what was the land assessed for?

Col. BLACK. That land has been assessed for the last 20 years at the same price, I think, and I do not know what that was; I do not recollect.

Senator VARDAMAN. Was it as much as $100 an acre, Colonel?

Col. BLACK. I think it was in that vicinity, Senator. I do not recall.

Senator JONES. How does it come, Colonel, that they do not change the basis of assessment on real estate?

Col. BLACK. I can not answer that question. I can tell you this though, in connection with values, that the city purchased large tracts of land adjacent to this property, and some of the land I myself sold them, 68 acres, at $500 an acre. It had no waterfront; it was low-lying land which could not be filled, on account of Fort Mifflin lying between the river and this property, and their fixed price for all the property they purchased and that was purchased a year ago—was at the rate of $500 an acre.

ıtor JONES. You said you had arrangements made for filling in, at you had the material close at hand. How would that be

BLACK. Pumped in.
ıtor JONES. Pumped in from where?
BLACK. From the river.
ıtor JONES. Was that the same sort of soil, generally, as was land?
BLACK. Yes; it is all sedimentary deposit.
ıtor JONES. How long would it take that to dry out and be-olid?
BLACK. Oh, from six months to a year. That would depend hat on the character of the fill, which varied. Some of it was ınd gravel and some was clay.
tor JONES. Do you know where they are taking dirt from now in?
. BLACK. The International Corporation?
ator JONES. Yes.
. BLACK. I do not know that they are filling. They had so excavating to do in connection with slips that they expected to a large surplus of material, and that material, I understood their engineers, they expected to deposit in the back part of roperty.
ator JONES. It was brought out here the other day that they are some sort of basin and bringing in some sort of filling in mate-om the outside. That seemed rather strange to me.
. BLACK. As a matter of curiosity I looked over their plans the option was running, and at that time they expected to the material out of a large basin back of a Government jetty, has been building for the last 30 years and is not completed. of that jetty they expected to have a basin where the boats be assembled and the final machinery, etc., put in. That basin xpected to dredge, and the material they planned to put in the ing land at the lower end of the property—the western end.
ator JONES. Do you know what the depth of the water is in the in front of this land?
. BLACK. I can indicate roughly. [Exhibiting a map.] There i-foot channel, and that 35-foot channel starts at the upper end ıear Fort Mifflin, the eastern end. At this end [indicating] the el of the Delaware River is probably within 400 feet of the bank.
ator JONES. You say there is a channel along the front here?
. BLACK. A 35-foot channel here.
ator JONES. How far is that from the land?
. BLACK. It is about 400 or 500 feet from this point; about 1,000 om this.
ator JONES. What is the depth of water from the land into this el?
BLACK. Well, there is a mud flat extends out there 150 feet. s bare at low tide. Beyond that the depth rapidly increases to and 35 feet.
ıtor JONES. Where are the ways going to be on the land?

Col. BLACK. This line [indicating] marks the land that has been all filled in. That was raised 10 feet above low water. The ways will start here at this point, and they will extend down to some point about here—50 ways.

Senator JONES. So that in order to get ships off these ways into the main channel there will have to be a lot of dredging done?

Col. BLACK. No. When they are launched, as I understand it, they will not take more than about 14 feet.

Senator JONES. Well, you said that here at one point it was bare at low tide.

Col. BLACK. Yes, but the slips will extend out into the river. The harbor line is out beyond these mud flats, and those slips will extend out there.

Senator JONES. What is the depth along there?

Col. BLACK. That will be 14 or 15 feet at low tide.

Senator JONES. And when they get into this main channel there is a 35-foot depth to Philadelphia?

Col. BLACK. Yes; and to the bay.

Senator JONES. Has Mr. Henson any interest in the American International Corporation?

Col. BLACK. None whatever. Mr. Henson is a lumber dealer in Philadelphia, and he purchased this property up here for a lumber yard, as I was informed.

Senator JONES. Did he have any interest in that American International Terminal Co.?

Col. BLACK. None whatever that I know of.

Senator VARDAMAN. Colonel, will you indicate on this map the boundary line of the land that the American International Corporation bought from you?

Col. BLACK. Yes, sir [indicating].

Senator VARDAMAN. That is now surrounded, I understand, by a levee or dyke on the water front?

Col. BLACK. This land here [indicating] is all filled in 10 feet above low water.

Senator VARDAMAN. How much above high tide?

Col. BLACK. About 4 feet above the highest tides. There is about 6 feet of tide.

Senator VARDAMAN. How about this other?

Col. BLACK. This other is about 4 feet above low water and about 2 feet below the highest tides. That is the character of thousands and thousands of acres that are back here [indicating].

Senator VARDAMAN. Then it is not true, as stated, that but for the dykes about 300 acres of that land would be subject to overflow to a depth of from 1 to 8 feet?

Col. BLACK. No, sir; it is not. I have been interested personally in this property for 30 years, and during those 30 years I do not know that there has ever been a time when there has been an overflow.

Senator VARDAMAN. Where does your levee extend around here?

Col. BLACK. Originally there were banks all along here [indicating]; that is, the old river bank. Across here there was a levee put up, and this entire area filled, so that there is no longer any levee required here. From this point to that point [indicating] there are

l the old river banks, and those river banks are lined wth stone. is [indicating] is the Government jetty that has been built to some nt in that vicinity; it is being built farther on down, to what is own as Tinnecum Island. That protects this land from any heavy rms or winds that would cut those banks. So in the past 10 years ave not had to expend $5,000 on the maintenance of the banks.

Senator VARDAMAN. This land was not used for any purpose, s it?

Col. BLACK. It was a very fertile piece of land until it was ruined.

Senator VARDAMAN. How ruined?

Col. BLACK. Oh, by not fertilizing it.

Senator VARDAMAN. Was it ever in cultivation?

Col. BLACK. All of it.

Senator VARDAMAN. It was not, then, as a matter of fact, reaimed from the sea?

Col. BLACK. Originally it was, sir. In the time of the Revolunary War this was an island, and this [indicating] was a chanel that went up back of Fort Mifflin.

Senator VARDAMAN. Could this land be occupied now with buildngs without filling in?

Col. BLACK. Yes; there have been houses there for 40 years, to my nowledge.

Senator VARDAMAN. I am speaking about the low land.

Col. BLACK. That land has practically the same elevation as this and, and there has been a house there, to my absolute knowledge, for 40 years.

Senator VARDAMAN. Built on stilts?

Col. BLACK. No, sir; right on the ground.

Senator VARDAMAN. What kept the water from running under it?

Col. BLACK. The river banks keep the water out.

Senator VARDAMAN. Do you think you would ever have gotten that rice for it if the war had not come on?

Col. BLACK. I would have gotten $4,000 an acre inside of five years, nd I was very loath to sell. I tried my best not to give the option, nd it was only after I learned it was absolutely essential for the Jnited States Government to have the whole tract in connection with his shipyard. I declined at first to give the option to the American nternational, and that is the reason for the two options, one being a reek after the other. They made representations to me, stating it ras absolutely essential, for the shipyard that they contemplated, to ave the entire tract. Otherwise I would very much have preferred o retain the land to which I held title alone. There were no compliations. There were complications in connection with the other, beause in case of Mr. Bohlen's death there were a large number who rere interested in that property.

Senator RANSDELL. If there are no further questions, that is all, Col. Black. We are very much obliged to you.

(Thereupon, at 5.15 o'clock p. m., the committee adjourned to meet t 2 o'clock p. m., to-morrow, Tuesday, February 12, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

TUESDAY, FEBRUARY 12, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., in committee room, Capitol. Senator Joseph E. Ransdell, presiding.
Present: Senators Ransdell (acting chairman), Sheppard, Vardaman, Shields, Nelson, Jones, Sherman, and Johnson.
Senator RANSDELL. Gentlemen, we have Mr. Baldwin with us this ernoon.
Mr. Baldwin, will you please take the stand? Please state your me, residence, and occupation.

ATEMENT OF MR. GEORGE J. BALDWIN, CHAIRMAN OF THE OARD, AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, NEW YORK CITY.

Mr. BALDWIN. My name is George J. Baldwin, formerly of Savnah, Ga., now of New York City; 540 Park Avenue, New York y.
Senator RANSDELL. Mr. Baldwin, will you state what you desire to te to the committee in your own way?
Mr. BALDWIN. Thank you very much, Senator. Perhaps I had ter tell just who I am in a business way and my business contions.
Senator RANSDELL. Yes; we would like for you to do that.
Mr. BALDWIN. I am chairman of the board of the American Interional Shipbuilding Corporation, which has the task of building a t at Hog Island. I am also the chairman of the board of w York Shipbuilding Corporation, which is one of the older shipilding corporations, of Camden, N. J., and which is building many sels for the Navy and some for the Shipping Board.
I am also president of the Pacific Mail Steamship Co., which is erating, I think, the only American boats of any prominence on the cific Ocean.
am occupying those offices because I am the senior vice president the American International Corporation, which is interested in se corporations. I am specially charged with the duty of looking r the shipping and shipbuilding interests of the American Interional Corporation, and in that position I have made a very carestudy of the needs of American shipping, and by the time war declared, on April 6, I think, perhaps we were more im

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with the necessity of the immediate construction of ships than any other private person in the country—perhaps even including the Shipping Board itself—because I felt, in my first conversations with the Shipping Board, that perhaps they did not appreciate the immediate necessity quite as much as we did on account of our studies.

Now, possibly, Senator, if you will permit me, I may read a memorandum of two or three pages which I have prepared on the subject, and which I think will open the whole subject.

Senator RANSDELL. We will be very glad indeed for you to do that, sir.

Mr. BALDWIN. And then I shall be glad to answer any questions.

I think this memorandum gives the point of view, perhaps a little differently from the way it has been given, in a fragmentary manner, by a good many different witnesses in this investigation. (Reading:)

In May, 1917, the United States Government, through the Shipping Board, invited American International Corporation to undertake the construction of a shipyard, to contain 50 ways, and to build therein a fleet of 200 cargo vessels of an aggregate tonnage of 1,500,000.

Early in July American International Corporation had prepared plans satisfactory to Emergency Fleet Corporation, and had agreed upon the essentials of a contract under which the work was to be done. This agreement provided for the formation of an operating company, the American International Shipbuilding Corporation, all of whose acts and undertakings were guaranteed by American International Corporation, which was then ready to begin immediately the work of constructing the shipyard during the pleasant weather of the summer and fall months.

Negotiations were then interrupted by the resignation of the general manager of Emergency Fleet Corporation, but immediately upon the appointment of Admiral Capps as his successor they were resumed at his request.

In conference with Emergency Fleet Corporation, American International Corporation repeatedly emphasized in the strongest possible manner the necessity of immediate work upon the shipyard, with quick preparation for vessel construction stating clearly that if yard construction was deferred until the winter months great additional costs and serious delay in the completion of the ships would be a necessary consequence.

After the loss of two and a half months of the best working time of the year, the contract was officially awarded on September 13, 1917, and American International Shipbuilding Corporation instructed to proceed.

It was well recognized by all concerned that this undertaking was to be the greatest and most difficult task in shipbuilding in which any nation had ever engaged, both on account of its great magnitude and necessity for unprecedented speed. The United States Shipping Board and the Emergency Fleet Corporation selected American International Corporation to perform this public duty for three dominant reasons:

First. It was composed of men who had been among the strongest and most successful in the nation in great industrial undertakings.

Second. It owned a large interest in the New York Shipbuilding Co., which had the most experienced staff of naval architects, engineers, officers, and workmen which could be assembled. It had an unsurpassed record for performance and for quick and effective construction of vessels of the best type.

Third. It was closely allied with the engineering firm of Stone & Webster, which had just completed one of the most difficult of the 16 great military cantonments, at the lowest cost and with the greatest speed, both.

Senator RANSDELL. Where was that?

Mr. BALDWIN. That was at San Antonio, Tex. And that has a very considerable bearing on this whole question, the fact that they did that work at both the lowest cost and the greatest speed. [Reading:]

A task of this magnitude and complexity could not be undertaken with any hope of success except by a well-organized body of competent men, trained by years of experience and accomplishment; no new organization could possibly

ether and trained in time to succeed in this new and difficult under-

ontract required the designing and construction of a suitable shipyard
) ways, together with the construction of 200 7,500-ton cargo vessels
l in every particular. This required a complete shipyard containing
mately as many ways as the combined yards of the five largest ship-
g companies in the United States; both the building of the yard and the
ction of the vessels must be accomplished at a speed hitherto unknown.
an International Corporation has been repeatedly instructed that speed
than economy was the primary requisite, and it has fully recognized this
d its own responsibilities.
nergency Fleet Corporation had not regarded this work as a war-time
y, but as a commercial proposition, and had consequently allowed not
n the five years which would ordinarily be required, the work could have
one with due regard for economy, and the expense required by extreme
voided. Great speed and careful economy can not both be secured in
e.
pressing need of the United States was ships immediately, and all that
quired, or that should be demanded, of those engaged in the work was
ercise of their utmost effort, their best ability, and the same care in
ing the money of the United States as would be used in spending their
This has been given.
oss of working time between June and October is the primary cause and
reason for the large construction cost; there has been no unnecessary
.
. This delay compelled work during a winter of unprecedented severity
of in the good working months of summer and fall.
d. Congestion on the railroads during the winter was vastly greater
ould have been the case during the summer period.
l. The cost of labor and materials have rapidly and constantly increased.
th. The addition of a second type of vessel, with double the engine
of the first, required doubling many of the essential features of the yard
led greatly to its cost and construction difficulties.
efinite estimate of $21,000,000 as the cost of the yard [illegible] made
as merely a preliminary figure arrived at by the engineers of Emergency
orporation and American International Corporation [illegible] cost of building a yard during the summer [illegible]
and designed for only one type of vessel.
[illegible]
increased [illegible]
winter, the increasing [illegible]
l, it would not be [illegible]
double the original figure.
[illegible]
, that the [illegible]
for [illegible]
[illegible]
an International [illegible]
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pply of fresh [illegible]
s, equal to that [illegible]

It must be located at a point where electric power could be obtained in amount equal to that required by a city of 300,000 people, and this power must be ready, as there was no time to construct a power plant.

It must be near a large industrial center with skilled mechanics and an unusual labor supply, together with the greatest obtainable amount of housing facilities for additional employees.

Owing to the location of the industrial plants supplying its needs, the yard must be on the Atlantic coast, somewhere between Boston and Baltimore. The consideration of New York was eliminated by instructions from Emergency Fleet Corporation on account of the Submarine Boat Co.'s proposed location near Newark. Sites east of New York were served by only one already overcrowded railroad, and were eliminated. Not one of the many other properties examined filled the requirements as well as the one selected.

The price paid for this property, $2,000 per acre, was not excessive, as shown by the attached list of properties which had been previously sold along the Delaware River.

I have that list here. We made a very careful study with Admiral Capps of the whole situation.

A clear statement is made in the contract that the Government has an option of taking this property at the exact price paid by the American International Corporation. After the representative of Admiral Capps had carefully examined the site and he had personally conferred with the sellers of the property, he then definitely instructed us to purchase the same at the price fixed. No individual or corporation interested has received or will receive any fee or part of the purchase price or take any profit in connection with this purchase. Any statements to the contrary are false. No profit or commission or earning of any kind will accrue to any of the corporations interested in the contract, nor to any of the individuals connected with them, except the stipulated fee allowances named in the contract. Any statement or intimation to the contrary is untrue.

All wages and salaries paid by the Government are fixed by Emergency Fleet Corporation and all changes approved by it. The salaries have been made as low as will secure the services of men competent for this task, upon whom depends the success of the work.

Materials are purchased either by American International Corporation as agents for Emergency Fleet Corporation, or, in the case of all of the larger items, such as engines, boilers, lumber, piling, crossties, etc., directly by the Government corporation itself, which also approves in advance every order for all other material.

The agreement stipulated "in case of failure of the agent at any stage of the work prior to completion, from any cause or causes within its control, to go forward with the work and make progress toward its completion satisfactory to the owner, the owner may terminate this contract" and purchase the land at the exact price paid by American International Corporation.

The total tonnage so far ordered is 935,000 dead-weight tons, capable when constructed of earning at rates fixed and approved by the Shipping Board chartering committee for steamers of 6,000 tons or greater dead-weight capacity, approximately $10 per ton per month, or, more exactly, $307,186 per day or $9,215,593 per month. This emphasizes the importance of speed merely as a commercial proposition. What the vessels are worth per month for the purpose of winning the war is beyond computation.

The entire work has progressed in accordance with our expected dates for completion. We are on schedule in the yard construction, in spite of every difficulty and delay which has been encountered, and from now on the building of ships in this yard will not be interrupted, but will continue with increasing speed.

If in the face of almost insuperable obstacles American International Corporation has absolutely kept its promises to Emergency Fleet Corporation, is it not reasonable to believe that it will keep them to the end and will deliver the vessels at the times named in the contract?

We base this expectation upon the assumption that future labor and railroad conditions will be no worse than those existing during the past five months, and upon the ability of Emergency Fleet Corporation to maintain an adequate flow of material to the yard as required, and provide the needed additional housing for employees.

Now, in adding to that statement, I should like to say that we ad expected that the yard would be completed sufficiently to begin ie laying of keels by the middle of February.

I would like to announce that we are ahead of our schedule. That e have, on yesterday, received the first carload of steel in the yard, nd to-day we are bolting up the keel of the first ship that is to be iunched from those works. I think that marks an epoch in the hole plan: that brings it up to our promises; and that the Govern- ient will get the ships at the time promised—and that is what we ave directed our entire time and attention to. We may have been uilty of many things; but we will get the ships, and we will get hem when we promised.

Senator RANSDELL. How many ships will have their keels laid his month, Mr. Baldwin?

Mr. BALDWIN. As many as we can get the steel for. We have 12 ways ready for the keels to-day. We expect to lay all of the keels within February and March, with the exception of, perhaps, 10 or 12.

Senator RANSDELL. By "all of the keels" what do you mean?

Mr. BALDWIN. Fifty keels during February and March.

Senator RANSDELL. Will there be 50 ways completed sufficiently to ay the keels before the end of March?

Mr. BALDWIN. No; we shall have about 40 completed before the nd of March; the other 10 may be delayed for 30 days more. The Shipping Board has instructed us to slow up on the completion of 18 of the ways.

Senator NELSON. The testimony here before this committee shows that on about 10 or 12 of those ways nothing has been done whatever. Is that not true?

Mr. BALDWIN. There has been some little work done, but not very much.

Senator NELSON. What little work?

Mr. BALDWIN. Oh, possibly the driving of a few piles; they had gotten their equipment ready.

Senator NELSON. That is all? So that, practically, there are 12 ways that you have done nothing on?

Mr. BALDWIN. I should not say "nothing," because we have accumulated the material, the men are ready, and the work is going ahead as fast as the Emergency Fleet Corporation can furnish us with piles.

Senator NELSON. You mentioned in that statement which you read the class of business men that were engaged in this enterprise.

Mr. BALDWIN. Yes, sir.

Senator NELSON. You refer to them as being high-class men; now those men never invested a dollar of their own money in it, did they?

Mr. BALDWIN. They have invested $1,800,000.

Senator NELSON. What is the good of parading those names before this committee if they did not invest a dollar of their own money in the enterprise?

Mr. BALDWIN. They have invested $1,800,000 in it.

Senator NELSON. Well, in buying the ground; but w [illegible] d States, are paying 6 per cent interest on that, are we n[illegible]

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It must be located at a point where electric power could be obtained in amount equal to that required by a city of 300,000 people, and this power must be ready, as there was no time to construct a power plant.

It must be near a large industrial center with skilled mechanics and an unusual labor supply, together with the greatest obtainable amount of housing facilities for additional employees.

Owing to the location of the industrial plants supplying its needs, the yard must be on the Atlantic coast, somewhere between Boston and Baltimore. The consideration of New York was eliminated by instructions from Emergency Fleet Corporation on account of the Submarine Boat Co.'s proposed location near Newark. Sites east of New York were served by only one already overcrowded railroad, and were eliminated. Not one of the many other properties examined filled the requirements as well as the one selected.

The price paid for this property, $2,000 per acre, was not excessive, as shown by the attached list of properties which had been previously sold along the Delaware River.

I have that list here. We made a very careful study with Admiral Capps of the whole situation.

A clear statement is made in the contract that the Government has an option of taking this property at the exact price paid by the American International Corporation. After the representative of Admiral Capps had carefully examined the site and he had personally conferred with the sellers of the property, he then definitely instructed us to purchase the same at the price fixed. No individual or corporation interested has received or will receive any fee or part of the purchase price or take any profit in connection with this purchase. Any statements to the contrary are false. No profit or commission or earning of any kind will accrue to any of the corporations interested in the contract, nor to any of the individuals connected with them, except the stipulated fee allowances named in the contract. Any statement or intimation to the contrary is untrue.

All wages and salaries paid by the Government are fixed by Emergency Fleet Corporation and all changes approved by it. The salaries have been made as low as will secure the services of men competent for this task, upon whom depends the success of the work.

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Now, in adding to that statement, I should like to say that we had expected that the yard would be completed sufficiently to begin the laying of keels by the middle of February.

I would like to announce that we are ahead of our schedule. That we have, on yesterday, received the first carload of steel in the yard, and to-day we are bolting up the keel of the first ship that is to be launched from those works. I think that marks an epoch in the whole plan; that brings it up to our promises; and that the Government will get the ships at the time promised—and that is what we have directed our entire time and attention to. We may have been guilty of many things; but we will get the ships, and we will get them when we promised.

Senator RANSDELL. How many ships will have their keels laid this month, Mr. Baldwin?

Mr. BALDWIN. As many as we can get the steel for. We have 12 ways ready for the keels to-day. We expect to lay all of the keels within February and March, with the exception of, perhaps, 10 or 12.

Senator RANSDELL. By "all of the keels" what do you mean?

Mr. BALDWIN. Fifty keels during February and March.

Senator RANSDELL. Will there be 50 ways completed sufficiently to lay the keels before the end of March?

Mr. BALDWIN. No; we shall have about 40 completed before the end of March; the other 10 may be delayed for 30 days more. The Shipping Board has instructed us to slow up on the completion of 18 of the ways.

Senator NELSON. The testimony here before this committee shows that on about 10 or 12 of those ways nothing has been done whatever. Is that not true?

Mr. BALDWIN. There has been some little work done, but not very much.

Senator NELSON. What little work?

Mr. BALDWIN. Oh, possibly the driving of a few piles; they had gotten their equipment ready.

Senator NELSON. That is all? So that, practically, there are 12 ways that you have done nothing on?

Mr. BALDWIN. I should not say "nothing," because we have accumulated the material, the men are ready, and the work is going ahead as fast as the Emergency Fleet Corporation can furnish us with piles.

Senator NELSON. You mentioned in that statement which you read the class of business men that were engaged in this enterprise.

Mr. BALDWIN. Yes, sir.

Senator NELSON. You refer to them as being high-class men; now those men never invested a dollar of their own money in it, did they?

Mr. BALDWIN. They have invested $1,800,000.

Senator NELSON. What is the good of parading those names before this committee if they did not invest a dollar of their own money in the enterprise?

Mr. BALDWIN. They have invested $1,800,000 in it.

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build them in the way you had been building ships in this country before. We had to adopt new principles. One principle was the manufacture of ships on a large scale. We in this country have done a great deal of that in other lines of industry, but we have never done it on ships, because we have never had the chance. But this emergency brought that possibility out.

And so we planned the building of 200 ships all exactly alike: every piece in every ship an exact duplicate of the same piece in every other ship; so that you could mix them all up and use them. That would enable us to get them built very much faster.

As time went on, the Shipping Board concluded that it would be better to have the second lot of ships 8,000, of faster speed; double the boiler power; double the engine power; and that made necessary quite a large additional planning of construction in the yard.

That did delay us some; that has delayed the work somewhat. We would have been—I can not say exactly—perhaps two or three weeks ahead of where we are to-day, if we could have gone right straight ahead with our original program of one-type ship. But at the time of the original contract I am not sure that the Shipping Board understood the submarine situation adequately; and they thought 11½-knot ships were satisfactory when the contracts were signed, but by the time the second order was given they had become satisfied that they would require a 15-knot ship—which was wise, but it delayed the work somewhat.

Senator RANSDELL. Did those 8,000-ton ships have a speed of 15 knots?

Mr. BALDWIN. They had a speed of 15 knots, possibly 15½.

Senator RANSDELL. How many of the 8,000-ton ships are there to be?

Mr. BALDWIN. Seventy.

Senator JOHNSON. Mr. Baldwin, you have described as one of the advantages which came to the Government as the result of this contract the fact of having the organization of Stone & Webster: is that correct?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. And that advantage you described as bringing to the Government the lowest cost and the greatest speed?

Mr. BALDWIN. The Stone & Webster organization at the time we started to discuss this program——

Senator JOHNSON (interposing). I realize that.

Mr. BALDWIN (continuing). Was then engaged in building the San Antonio cantonment.

Senator JOHNSON. You said that.

Mr. BALDWIN. They took their own organization and filled it up by adding a great many men from all parts of the country: they have welded those men into an organization and have gotten them working smoothly together. You want to take the whole thing into consideration.

Senator JOHNSON. I realize that. By virtue of that fact there came to the Government out of this contract the lowest cost of construction and the greatest speed of construction, I believe you said in the statement that you have read to the committee?

Mr. BALDWIN. Yes, sir; that is my statement.

Senator JOHNSON. And that is accurate?

[r. BALDWIN. Yes, sir; it is accurate in regard to the cost. Their tonment cost, I think, $6,000,000. I am not clear on that.
enator JOHNSON. The cost of driving 16,252 piles up to December was $513,000, against an estimated cost of $89,000, an increase of per cent. We did not get the benefit of the lowest cost of conaction in the piling, did we?
Mr. BALDWIN. Those figures are in error, sir.
Senator JOHNSON. I will be very glad to have you correct them.
Mr. BALDWIN. Those figures are in error. I have not the details of it, but I can tell you what was included in the $513,000. It inided the whole cost of bringing all the equipment together, setting all up, before we had been able to really drive any amount of ling. What should be charged is that there should be added to at cost the cost of all the additional work until that is completed, d that should be prorated over the whole in order to find out what e true cost of driving the piles was.
Senator JOHNSON. Well, will you say that the cost of driving the les will be anything like commensurate with the estimated cost?
Mr. BALDWIN. My impression is that the cost of driving the piles ould possibly be 75 per cent more than the original estimate.
Senator JOHNSON. Do you know what the estimate was?
Mr. BALDWIN. No, sir; I do not recall all of those details.
Senator JOHNSON. Are you familiar with the various details of the timates?
Mr. BALDWIN. No, sir; I am not familiar with the details of the timates.
Senator JOHNSON. Then I presume it would not be entirely just to u to examine you as to the details of the work?
Mr. BALDWIN. No, sir; I could not give you any true information out those.
Senator JOHNSON. That would be quite impossible?
Mr. BALDWIN. Yes, sir.
Senator JOHNSON. That would come under the jurisdiction of hom, if you please?
Mr. BALDWIN. That would come under the jurisdiction of D. P. obinson, who is the president of the corporation.
Senator JOHNSON. And he knows all about the details of the work?
Mr. BALDWIN. Well, I can hardly say that, because you must reember that this is an enormous task. No one man can carry——
Senator JOHNSON (interposing). Well, at any rate, he is the supersing head and the executive officer controlling the work?
Mr. BALDWIN. Of the actual construction; yes, sir.
Senator JOHNSON. He is familiar with the men who do the work?
Mr. BALDWIN. Yes, sir.
Senator JOHNSON. He is familiar with the men who are on the b?
Mr. BALDWIN. Yes, sir.
Senator JOHNSON. And yet you say he is utterly in error in sayg that Mr. Connick spent about 10 per cent of his time there?
Mr. BALDWIN. Mr. Connick is not one of his employees. Mr. Conck is an employee of the American International. Mr. Robinson d not know how much time I spent on it; I never reported to Mr. obinson how much time I spent on it. Neither did Mr. Connick.

Senator JOHNSON. Did you report to anybody?

Mr. BALDWIN. I reported to the executive committee and the board of directors of our own corporation.

Senator JOHNSON. The American International?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. They meet where?

Mr. BALDWIN. They meet in New York.

Senator JOHNSON. And have you spent a great deal of your time upon this particular construction?

Mr. BALDWIN. Practically all of it since the inauguration of the contract, when we first began to talk to Admiral Capps about it.

Senaor JOHNSON. And neither you nor Mr. Robinson is familiar with exactly what the other does?

Mr. BALDWIN. Well, yes, sir; we are quite familiar.

Senator JOHNSON. Well, he is not familiar with the fact, you say, that you spend all your time on it.

Mr. BALDWIN. Well, he does not know what I am doing outside; he knows what he is doing on his job.

Senator JOHNSON. Exactly; but he purported to give us officially the statement of these who spent any time upon this particular job.

Mr. BALDWIN. I did not spend my time down at the yard on the job; and that was what he was trying to express in his letter.

Senator JOHNSON. Did you spend your time on the job in New York?

Mr. BALDWIN. In New York, and very largely in Washington.

Senator JOHNSON. In New York and Washington? How much time did you spend in Washington?

Mr. BALDWIN. I was compelled to be here practically half the time.

Senator JOHNSON. Do you mean since the contract was entered into?

Mr. BALDWIN. Since we first began to discuss it.

Senator JOHNSON. You have been here nearly half of your time?

Mr. BALDWIN. Nearly half of my time.

Senator JOHNSON. And with whom have you been discussing it here?

Mr. BALDWIN. I have been discussing it with Admiral Capps; I have been discussing it with Mr. Hurley; I have been discussing it with Mr. Piez; and discussing it with Mr. Stevens; discussing it with Admiral Bowles; and discussing it with our own people down there.

Senator JOHNSON. And that has occupied practically half of your time?

Mr. BALDWIN. Very nearly half of my time here in Washington.

Senator JOHNSON. Well, you do not know anything really, then, about the cost of the piling, do you?

Mr. BALDWIN. Nothing, except the statements of my subordinate officers.

Senator JOHNSON. Well, what subordinate officers, for instance?

Mr. BALDWIN. Mr. Muhlfeld is the man I got that special information from; he is in charge of that particular work.

Senator JOHNSON. Do you know anything about the cost of grading?

Mr. BALDWIN. No, sir.

Senator JOHNSON. Do you know anything about the cost of mporary buildings, temporary telephones, and temporary rail-ads?

Mr. BALDWIN. No, sir; I can not tell you about those matters.

Senator JOHNSON. Sir?

Mr. BALDWIN. No, sir; I can not tell you about those matters.

Senator JOHNSON. I ask you only generally concerning them be-ause you state that you do not know the details; but I asked you ecause you did correct the statement as to piling.

Mr. BALDWIN. Because that was in Mr. Piez's statement.

Senator JOHNSON. Yes; it is an official statement which has been led here with the committee.

Mr. BALDWIN. And I then looked into it to see whether it was orrect.

Senator JOHNSON. Did you look into the cost of temporary build-ngs, temporary telephones, and temporary railroads?

Mr. BALDWIN. No, sir; I did not.

Senator JOHNSON. Well, do you know that in that particular tatement, just two lines below the statement with regard to piling, e said that $698,269 had been expended for which no estimate at ll had been made?

Mr. BALDWIN. He was incorrect in one particular. I do happen to ecall that an estimate was made for temporary railroads, which was art of that.

Senator JOHNSON. Well, did you look into that matter?

Mr. BALDWIN. I discussed it with the man in charge, Mr. Muhl-eld.

Senator JOHNSON. Then you have looked into it?

Mr. BALDWIN. I simply discussed it with him; I have not gone any urther than that.

Senator JOHNSON. And he told you that there was a mistake; that n estimate as to that had been made?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. Did he tell you what estimate it was that had en made, or in what the mistake consisted?

Mr. BALDWIN. I do not recall that.

Senator JOHNSON. He simply said there was a mistake, and you ked nothing further?

Mr. BALDWIN. He said he would call my attention to the fact that ere was an appropriation made for temporary railways.

Senator JOHNSON. And that was the extent of the conversation?

Mr. BALDWIN. My impression is that he stated that about $150,000 d been appropriated for that.

Senator JOHNSON. And did he state that $698,000 had been ex-nded for it?

Mr. BALDWIN. Oh, no; that does not present a clear picture of that uation at all. Now, if you will permit me, Senator, the case of y specific statements of that kind, there is only one way to answer em really and intelligently, and that is to answer them definitely d specifically.

Senator JOHNSON. That is the way I desire them answered, if y can be.

Mr. BALDWIN. Now, all of those things, of course it is impossibl for me to gauge what questions may be in your minds and what que tions you would like to have answered. If any questions can be pu down specifically, we will be glad to make specific answers, or if w can bring any information we will be glad to bring it.

Senator JOHNSON. Well, I think that will be done before we con clude, really. The specific cost of grading, temporary roads, and th like—would you answer that you are not familiar with those?

Mr. BALDWIN. No; I am not familiar with those.

Senator JOHNSON. Now, did you ask Mr. Muhlfeld about state ments contained in Mr. Piez's report?

Mr. BALDWIN. I asked him about that particular piling and abou the railways.

Senator JOHNSON. Did you ask him about the cost of grading?

Mr. BALDWIN. Not personally, I have not gone into those matters that is not my task.

Senator JOHNSON. Did you read Mr. Piez's report?

Mr. BALDWIN. I read Mr. Piez's report very carefully.

Senator JOHNSON. Have you taken any means to correct any of th statements that are therein contained?

Mr. BALDWIN. We have been devoting our minds to the job, Sena tor. We know there are some criticisms; but we felt that the onl place to answer any criticisms was to answer them here. Our official have conferred with the officials of the Shipping Board, to make cor rections; and the gentleman who made that statement to Mr. Pie afterwards desired the privilege of withdrawing that statement.

Senator JOHNSON. I may have misunderstood you. Did you sa that Mr. Piez asked the privilege of withdrawing his statement?

Mr. BALDWIN. No; the gentleman who made it to Mr. Peiz; gentleman of the name of Towle, he made the statement to Mr. Peiz and he wrote us that he had done so, and then desired the privilege o withdrawing his statement to us.

Senator JOHNSON. Now, you came here to-day, did you not, to cor rect the misapprehension, as you have termed it, under which w might have labored in respect to the picture of conditions at Ho Island?

Mr. BALDWIN. As far as possible; yes, sir.

Senator JOHNSON. Did you come here prepared with any stat ment of cost to refute any of those things?

Mr. BALDWIN. I could not come here prepared with a definite stat ment to answer every charge that has been made all through th long and extended investigation; that would have been impossible.

Senator JOHNSON. I am not aware that any charge has been mad except that it has been asserted repeatedly that there was an undu extravagance, which has been variously described, as the pictori language of the individual might see fit to describe it—and that alor is what has been stated here again and again.

Now, you were aware, I think, were you not, that the charg was extravagance; that there was a delirium of extravagance, some witness put it, or a saturnalia of expenditure, as it might ha been put by some one else. You are aware that that was the pa ticular matter that has been engrossing the attention of the com mittee, were you not?

Mr. BALDWIN. I have heard those charges; yes, sir.

ator JOHNSON. Well, have you come here prepared at all to r those statements concerning extravagance?

BALDWIN. To answer them in this way, that following the of these same men who are now engaged on this work, it is ceivable to me that they should do the work at the lowest figure case, and then immediately proceed to waste the Government's y in the other. It is not true. It depends on how you view the ion, as to whether there has been extravagance and waste there, ether there has not been.

ator JOHNSON. When you say "these men," whom do you ?

. BALDWIN. I refer to the principal officers who are on the job .

ator JOHNSON. Yes.

. BALDWIN. If you view it as a commercial proposition, Sena- hen I think the cost has been unwarranted. If you view it as t of war, it has not.

ator JOHNSON. We will reach that subsequently as to the object ew, because you are quite right there: we are all most concerned tting ships.

. BALDWIN. We have exerted ourselves straight through to that and, as I say, we have got to the point where we have begun ild ships.

ator JOHNSON. And you are going to have them built in accord- with the terms of your contract—this year?

. BALDWIN. Yes, sir.

ator JOHNSON. Just as many as the contract covers?

. BALDWIN. We expect to finish 52 ships this year.

ator JOHNSON. Yes—that is, if the transportation facilities ady and if material is brought to you as you desire; is that it?

. BALDWIN. Yes, sir.

ator JOHNSON. What has been your situation with respect to portation facilities thus far?

. BALDWIN. It has been very bad.

ator JOHNSON. What has been your situation with respect to ials to be furnished thus far?

. BALDWIN. It has been very bad.

ator JOHNSON. And in either instance has it reached your ex- tions?

. BALDWIN. In neither instance.

ator JOHNSON. In neither instance; each has caused delay, has ?

. BALDWIN. Each has caused delay.

ator JOHNSON. And a considerable delay?

. BALDWIN. Considerable delay.

ator JOHNSON. Did you know at any time that there were 1,300 at Hog Island containing material, upon which the Govern- was paying demurrage?

. BALDWIN. I heard that statement made. Personally I had no ledge of it.

ator JOHNSON. Well, during the time——

. BALDWIN (interposing). But remember, Senator, that in spite se delays and conditions, we are on time to-day in the yard

Senator JOHNSON. I realize that. And in spite of them, i material comes in, if the transportation facilities are correct, a other things turn out as you desire, you expect to have the ready at the specific time promised?

Mr. BALDWIN. We do.

Senator JOHNSON. Yes; that is understood, I think, Mr. Bald But were you aware during the time that those 1,300 cars we Hog Island that they were there?

Mr. BALDWIN. Yes; I knew—I do not know that I knew that were there, but I knew there was a congestion of cars there; than there should have been.

Senator JOHNSON. What did you do about that?

Mr. BALDWIN. We worked as hard as we could to relieve that gestion, and we relieved it.

Senator JOHNSON. What did you personally do about it?

Mr. BALDWIN. I had a conference with Mr. Holden, who was down there by Mr. Chambers and who came to see me about i asked him to go and look up the job, which he did. He came and reported to me that we were getting the best of that congest that there were only 500 cars against us; and that we were unloading about 200 cars a day.

Senator JOHNSON. When was this conference?

Mr. BALDWIN. I could not say. Immediately after Mr. Ho was appointed—four or five days.

Senator JOHNSON. Well, was it a considerable time after the gestion had occurred?

Mr. BALDWIN. It was just at the tail end of the time when highest congestion had taken place.

Senator JOHNSON. Was that the first conference you had ha that regard?

Mr. BALDWIN. The first conference I have had; yes, sir.

Senator JOHNSON. And was that the first thing you perso did in that respect?

Mr. BALDWIN. Nothing except to confer with Mr. Robinson, president, and discuss the situation with him, and the means he was taking to relieve it.

Senator JOHNSON. When was the American International for please?

Mr. BALDWIN. It was formed in—I think in about November, years ago.

Senator JOHNSON. Do you mean 1916 or 1915?

Mr. BALDWIN. I think it was 1915; about two years ago.

Senator JOHNSON. Do you feel certain of the date or not? I not clear myself as to the date.

Mr. BALDWIN. Yes; it was in 1915.

Senator JOHNSON. 1915?

Mr. BALDWIN. I am clear on that.

Senator JOHNSON. And up to that time, what had been your ticular occupation, if you please, Mr. Baldwin?

Mr. BALDWIN. My occupation had been—I had been engaged the operation and management of public utilities in the South.

Senator JOHNSON. Your life, indeed, had been spent, had it with public utilities?

Mr. BALDWIN. I have been a manufacturer of fertilizer in the outh. I had been engaged in manufacturing and in the operation of nsiderable industrial plants of a great many varied kinds.

Senator JOHNSON. Up to the time of the formation of the merican International Corporation you had not been engaged in ipping, had you?

Mr. BALDWIN. No.

Senator JOHNSON. And just prior to that time you had been prinpally engaged in public utilities, had you not?

Mr. BALDWIN. Just prior to that time; yes, sir.

Senator JOHNSON. Now, after the formation of the American nternational Corporation, I understood you to say that it took over e New York Shipbuilding Corporation; is that correct?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. And did you at the time of the formation of the merican International hold any official position with that corpoation?

Mr. BALDWIN. With the American International?

Senator JOHNSON. Yes, sir.

Mr. BALDWIN. I became the vice president of it. That was my irst official connection with it.

Senator JOHNSON. When did it take over the New York Shipuilding Corporation?

Mr. BALDWIN. It took that over, I think, in April or May, 1916.

Senator JOHNSON. April or May, 1916. From that time did it ngage in the shipbuilding business?

Mr. BALDWIN. Do you mean the New York Shipbuilding Corporation?

Senator JOHNSON. No; the American International.

Mr. BALDWIN. The American International itself has never built ships.

Senator JOHNSON. Never engaged at all in building ships?

Mr. BALDWIN. Never engaged in building ships; it is not formed for that purpose.

Senator JOHNSON. And after May, 1916, your first negotiations with the Government were by the American International?

Mr. BALDWIN. By the American International Corporation; yes, sir.

Senator JOHNSON. In May, 1917?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. In July, 1917, as I understand you, you were prepared to enter into your contract, and the tentative draft of the contract had been submitted?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. Has the stock of the American International been listed?

Mr. BALDWIN. Yes.

Senator JOHNSON. When?

Mr. BALDWIN. I do not remember, sir. I can not tell you that.

Senator JOHNSON. Well, was it not last year?

Mr. BALDWIN. I can not tell you.

Senator JOHNSON. If I recalled the date, would you know?

Mr. BALDWIN. No: I do not think I should.

Senator JOHNSON. Do you know whether it was August, 1917?

Mr. BALDWIN. I do not.

Senator JOHNSON. When you prepared to enter into your contract was there in existence the corporation that you now term the American International Shipbuilding Corporation?

Mr. BALDWIN. No, sir; that was organized for this particular purpose.

Senator JOHNSON. And when was that corporation organized?

Mr. BALDWIN. It was organized immediately after September 13, the signing of the contract, or possibly immediately before, but about that time.

Senator JOHNSON. That is, the contract was taken with the American International Corporation, that was not engaged in shipbuilding, and after the contract was taken you organized the American International Shipbuilding Corporation to engage in shipbuilding?

Mr. BALDWIN. At about that time; it may have been before or after.

Senator JOHNSON. At about that time?

Mr. BALDWIN. Yes, sir; it was organized for that purpose.

Senator JOHNSON. That is correct, is it not?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. When was the American-International Terminal Corporation organized?

Mr. BALDWIN. That had been organized previously, for some months; I do not recall how many.

Senator JOHNSON. And for what purpose was that organized?

Mr. BALDWIN. For study of the terminal situation for railways and steamship terminals all along the coast.

Senator JOHNSON. Was that during 1917 that it was organized?

Mr. BALDWIN. Possibly; I could not give you the date of that.

Senator JOHNSON. Senator Vardaman has suggested that, if you can at your convenience, you be asked to put in a list of the directors of the American-International Corporation; of the American-International Shipbuilding Corporation; and of the American-International Terminals Co., with the place where each was organized, or, rather, the principal place of business of each.

Mr. BALDWIN. Yes, sir; but possibly I can better answer your question by explaining exactly what they are and why they were formed.

Senator JOHNSON. I beg your pardon——

Mr. BALDWIN (interposing). I will do that.

Senator JOHNSON. I wish you would add to that the New York Shipbuilding Corporation. Now, I beg your pardon, I did not want to interrupt you, but I did not catch what you said.

Mr. BALDWIN. Perhaps I can answer better what is in your mind by telling you the exact relations of those corporations and just why they were formed and how it happened.

Senator JOHNSON. I will be very glad to have you do so.

Mr. BALDWIN. Well, to go back to the first one, the American-International Terminals Corporation. The congestion around New York had been very great in railway and steamship terminals. It seemed to us that it was a situation that would demand some action very soon, or we were going to have more serious congestion there.

We formed that particular corporation for the purpose of studyig the whole terminal situation up and down the coast. It did udy it, and that was practically all it ever did.

In studying that it had studied this particular terminal that we fterwards bought. It was considered first as a railways terminal. he men who are the directors of that are, practically all of them, merican-International Corporation men. That is purely a subidiary corporation of the parent company, in which two or three ther parties are interested.

The Shipbuilding Corporation has a capital of $2,000, and was ormed merely as a matter of operating convenience, by consultation ith the Shipping Board, in order that all of the accounts conected with shipbuilding and with the yard could be kept separate nd distinct and not confused with any account of the general cororation. That is all it is. It is employed to do the work, just xactly as I would employ an individual to do a certain piece of ork.

The New York Shipbuilding Corporation is on a different basis. n that corporation we own, possibly, a third interest.

Senator NELSON. Who owns the other two-thirds?

Mr. BALDWIN. About another third is owned by the Atlantic ransport Co., which is one of the International Mercantile Marine ines. Well, the second third is owned partly by them and partly y W. R. Grace & Co. The other third is owned by the public.

That corporation was bought because all of those—our corporaion and the other two corporations—needed ships, and there seemed o be no other way to get them at that time than to either build or uy your shipyard; and we bought it. And then as soon as we ought it the war came along and the Government took it, and so that s a Government yard to-day.

Senator JOHNSON. Now, the New York Shipbuilding Corporation as a going shipbuilding concern, was it not?

Mr. BALDWIN. Organized about 1901 or 1902; yes, sir.

Senator JOHNSON. And it had a yard?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. Situated where?

Mr. BALDWIN. Camden, N. J.

Senator JOHNSON. And it has continued its work of shipbuilding?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. Continued it after this contract the same as efore, did it not?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. Did it continue with its executive force and ith its working forces subsequently to the contract just as it did efore?

Mr. BALDWIN. It continued with its force; some of the time of f those men—quite a lot of the time of those men—has been given o this organization in working it out.

Senator JOHNSON. Can you tell me some of them?

Mr. BALDWIN. Well, Mr. Kneelands's time, a great deal of that. Mr. Andrews, who is the general yard manager, has had to give a reat deal of his time to it, because all of the templates on this job re being worked out in the mold loft of the New York Shipbuildig Corporation. Mr. Magoon, vice president, has given a good

deal of his time; Mr. Lufkin, chief engineer, has given a good deal of his; possibly half a dozen others, more or less, have given much of theirs. Those are the principal ones.

Senator JOHNSON. And the New York Shipbuilding Corporation has been taken over by the Government—its yard?

Mr. BALDWIN. They have taken over the vessels; the Shipping Board has taken over the merchant ships, and we are building for the Navy.

Senator JOHNSON. They are building for the Navy Department at present?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. And they have been continuously since this contract, have they not?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. So that the American-International, in this particular contract, did not take over the New York Shipbuilding Co., did it?

Mr. BALDWIN. Oh, no; it had bought its interest in the New York Shipbuilding Co. before this contract began.

Senator JOHNSON. They are two separate and distinct businesses, are they not?

Mr. BALDWIN. Two separate and distinct businesses, yes, sir.

Senator JOHNSON. Do you know what contracts Stone & Webster have had with the Government?

Mr. BALDWIN. I know they are building at the Rock Island Arsenal, for instance, at no fee at all, merely as a matter of public duty. They have been engaged to send some of their principal men to France, for work there in connection with the Ordnance Department, I think, in putting up buildings there. There are some other Government things in which they are interested, I think, but I am not fully conversant with all of their contracts.

Senator VARDAMAN. May I ask a question at this point? You say they are conducting that work at Rock Island purely for the Government. Are they being paid for it?

Mr. BALDWIN. Not at all. They make nothing out of the Rock Island Arsenal at all; they are doing that merely as a matter of public duty.

Senator VARDAMAN. Well, is it not a matter of fact that these men that they furnish to do your work are paid 100 per cent more than they pay them?

Mr. BALDWIN. No, sir; I do not think so.

Senator VARDAMAN. Well, witnesses have testified before this committee to that effect.

Mr. BALDWIN. Well, there may possibly be one or two of them; I do not know; but that does not give you a clear view of the situation at all.

Senator VARDAMAN. It gives us what appear to be facts.

Senator JOHNSON. Well, I have been informed—and if the information is erroneous I should like to know it, but it was testified before the Committee on Military Affairs this morning—that Stone & Webster have $250,000,000 of Government contracts. Do you know anything about that?

Mr. BALDWIN. The only suggestion I can make there is that the French contracts might possibly run, under some conditions, to

00,000,000. What their terms are for that I do not know. Pos-
ɔly the balance of it may be intended to refer to this contract, or,
ssibly, all of it. This contract runs to nearly $200,000,000.

Senator JOHNSON. You do not know whether, when that statement
as made, it included this contract, do you?

Mr. BALDWIN. I do not; no, sir. I am not a member of Stone &
Vebster at all.

Senator JOHNSON. You are brought in rather intimate contact
ith them, however, in this particular contract, are you not?

Mr. BALDWIN. Very.

Senator JOHNSON. And you gave to Senator Nelson as a reason
or the increase in salaries that the men had to go down there and
ngage in temporary work, and leave, practically, their homes?

Mr. BALDWIN. The bulk of the people down there, you must realize,
enator, are not regular employees of Stone & Webster; they are men
ho have been brought to the concern, largely, at the time of the
uilding of the cantonments.

Senator JOHNSON. Yes. Well, their salaries have been increased
ver what they got at the cantonments, have they not?

Mr. BALDWIN. I am not clear on that.

Senator JOHNSON (continuing). In very many instances?

Mr. BALDWIN. But take the regular employees of Stone & Webster.
ny man who is living in Boston and continuing right along to work
n his regular job can live on one salary. But if you take him away
nd put him somewhere else to work for a time his expenses will be
ery much increased, and you will have to pay him more money.

Senator JOHNSON. So that, if he was employed at the cantonment
t San Antonio, Tex., his expenses would be greater, and therefore
is salary ought to be greater?

Mr. BALDWIN. I should think so.

Senator JOHNSON. And do you think that the mere fact that he
ould be at Hog Island ought to increase his salary?

Mr. BALDWIN. I can not tell you how much each one of those men
ught to be paid. That is impossible for me to do.

Senator JOHNSON. Did you make any investigation to determine
hether or not there was gross extravagance at that plant?

Mr. BALDWIN. I have made this investigation. I have been down
here and looked it over many times. I have gone over the account-
ng. I have discussed the matter with all the different officials. I
m perfectly satisfied that if we could have had five years to do this
ob we could have done it a great deal cheaper.

But the difficulty we have had down there is that we have had to
evote our whole minds to speed. We could not think enough about
ther things. We have had to get the things done quickly. And
oubtless, you may say, there have been mistakes, and there have been
ll sorts of things done that you would not do if you were going
head with an ordinary commercial job.

Now, it ought to have taken at least five years to do this work, and
e have to do it in 22 months. Is it not reasonable to think that
t is going to cost a good deal more? And when it does—suppose
ll that cost is double what that original idea or estimate was—even
hen that does not bring the final total cost of your ships up above
hat the Shipping Board has contracted for in other yards, without
ncluding the cost of the yard.

Senator JOHNSON. Yes; I followed your statement in that regard.

Mr. BALDWIN. Now, I feel that if the particular men who produced that work—they had the same criticisms in the San Antonio cantonment, that they were extravagant; that they had all sorts of improper things down there; that they had too much equipment, etc. But when it came out in the end their method was proven correct, because they succeeded finally in bringing it down to a lower cost than anybody else, and they were competing with all the great contractors in the country. They got speed and economy in the end.

Senator JOHNSON. Do you know anything about whether there has been economy or extravagance on the Hog Island job?

Mr. BALDWIN. I think there has been very great expense on the Hog Island job; there is no doubt about that; there is no denying it.

Senator JOHNSON. Have you made, personally, any investigation to determine what that expense is or in what direction it has occurred?

Mr. BALDWIN. I can give you one instance; yes. In unloading cars things happen on this job that would not happen in a commercial job. Cars come in at the rate of 200 a day. There will be possibly 80 of those cars loaded with piles; 20 or 30 carloads of lumber in box cars; there will be half a dozen loaded with machinery; and some loaded with bricks and all sorts of things.

Now, you put your force of men on in the morning designed to unload the whole bunch by night. Your piling cars go off pretty quickly; your lumber cars are a little more difficult to get off. And your men are moved from those cars that are easy to unload until finally you get a large number of men on the other cars; on the last cars of brick, etc. And then you find that you have more men than you can use. What are you going to do with those men? Are you going to discharge them? Or are you going to keep them in order to get those cars quickly unloaded?

We have had the idea that we ought to keep those men there.

Now, in regard to piles. I remember that the report came in that one of our pile drivers was working absolutely at only 8 per cent of efficiency because we had not the piles on hand. Now, of course, we do not supply the piles; they are supplied by the Emergency Fleet Corporation; we have no voice in that. Another pile driver was working on only 22 per cent of efficiency because of lack of piles.

You can not take those pile-driver gangs and discharge them because you have not got the piles ready. You have to keep your gangs of men so that you will have your gangs organized when the piles do come in.

Commercially, you can see that sort of thing does not happen, but here it does.

Now, you go down there and you see that pile-driving gang knocking around with their hands in their pockets and driving only 10 or 12 piles a day when they ought to drive 40 or 50 a day, and you say, "Just look at those fellows loafing."

But what are you going to do when you want speed? You must hold your gangs together, and it must cost you a great deal more than it would ordinarily.

Now, those are the reasons, I think, for what seems like extravagance. I do not think it is truly extravagance; it simply seems so.

Senator JOHNSON. Is this the entire explanation that you desired to make in reference to this extravagance?

Mr. BALDWIN. You can go through the whole line of the work in that same way. I bring up those two typical instances to you because I have looked into those particular cases.

Senator JOHNSON. What I am endeavoring to do is to give you the opportunity to make the fullest possible explanation of the extravagance at Hog Island. That is the reason I keep asking you as to your knowledge of it and as to your explanation of it, and I want you to say everything you can now in its defense, in its explanation, its palliation, or in any other fashion that you desire to designate it, so that we may have the record from you authoritatively upon that subject.

Mr. BALDWIN. The only possible manner to give you the correct and definite information is to have here, to summon before this committee, every single individual who has charge of those different things and let him give you his testimony as to his work there.

Now, you can do that. I will have 25 of them; I will have 50 of them; I will have any number of them that you want down here who will testify directly of their own knowledge and who will prove clearly to you and will answer each question distinctly and definitely. Of course I have no knowledge of all those details.

Senator JOHNSON. I asked because I thought you were making an explanation of them. Now, of course——

Mr. BALDWIN (interposing). No, sir; I do not attempt to make an explanation of all those details there.

Senator JOHNSON. I ask you, then, to make any explanation you desire in relation to the extravagance at Hog Island. When you have concluded, if you will just tell me you have concluded, we will dismiss the subject.

Mr. BALDWIN. My explanation of it is simply a general denial that there has been any extravagance down there, under the conditions imposed upon us by the Shipping Board, of producing the ships at the earliest possible date.

Senator JOHNSON. That is your answer, is it?

Mr. BALDWIN. That is my answer.

Senator JOHNSON. And as to the delays——

Mr. BALDWIN. And we are producing the ships. We started to-day.

Senator JOHNSON. Yes; and you are going to have them. If transportation is all right and if the material is delivered and if nothing unforeseen occurs, you expect to have the ships?

Mr. BALDWIN. That is not a fair statement.

Senator JOHNSON. You think we ought to leave out the words "if nothing unforeseen occurs"?

Mr. BALDWIN. I think you ought to take my exact statement that I read to you, that if the conditions are no worse and if the Emergency Fleet Corporation does its duty and Congress will do its duty in providing the housing facilities for those men which are needed all over the country and needed seriously everywhere—with those things done we will do our part.

Senator JOHNSON. What have you done yourselves in relation to the housing conditions?

Senator JOHNSON. Did you acquiesce in the suggestion of the ping Board to postpone the completion of 18 ways not yet begu

Mr. BALDWIN. We acquiesced in their request that we sho that, and we did it against our own better judgment. We thin are wrong in that.

Senator JOHNSON. You think that you could operate 50 wa cessfully, do you?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. And that their viewpoint, that only a s number could be operated expeditiously and successfully, i neous?

Mr. BALDWIN. That is a question of judgment.

Senator JOHNSON. Oh, necessarily.

Mr. BALDWIN. Our judgment lies one way and their judgme the other.

Senator JOHNSON. Well, you think they are in error when th lieve that only a small number of ways can be expeditiously ar cessfully operated?

Mr. BALDWIN. I do not like to use the word "error" in the nection. I should like to say that their judgment differs fro in that respect. And we think we know the job.

Senator JOHNSON. I do not know how else you can say he error, except to say that he differs from you; and you are pe clear in your own judgment, are you not?

Mr. BALDWIN. I am perfectly clear in that matter; yes, sir.

Senator JOHNSON. As to your labor situation, you are fa are you not, with the report that was made by Mr. Felton?

Mr. BALDWIN. No, sir; I am not.

Senator JOHNSON. Have you read it at all?

Mr. BALDWIN. No, sir; I have not seen it. I remember t Mr. Felton was there, though.

Senator JOHNSON. Well, you looked quite significantly at m you said, "I remember the day Mr. Felton was there." Go and tell about it, if it is anything that would be interesting t

Mr. BALDWIN. Well, I do not know; I ought not to joke on matters of this kind.

Senator VARDAMAN. I think not.

Mr. BALDWIN. But Mr. Felton was there with Mr. Hurle Mr. Piez, and Mr. Stone, and myself. We went through the y I said, at a very rapid pace, during the time when the men lunch or dinner. We started in at about 12 o'clock; I think t there about half past 11. During most of the time the men lunch.

Then we went in and took our lunch about 1 o'clock; and as ished they were compelled to take their train; and we got int mobiles and drove out through the yard; and as we left the y of the subcontractors had two or three cars of cinders tha frozen; and he had a gang of about 25 men on each car, diggin at those cinders.

And Mr. Felton looked up at that and he said, "My gracio fellows do waste labor out here." And I said, "For heaven do not judge us by a couple of cars of cinders."

And I suppose, to unload those cars of cinders in the wint or at least one of the contractors told me that is cost $70 a

to unload a car of frozen cinders; when he could have unloaded it in the summer time for $2 or $3. That is where the cost comes in; we are doing much of that work in the wintertime instead of in the summer time; and that is where there are delays and excessive cost.

Senator JOHNSON. Well, did you get the impression that Mr. Felton's report is based on the unloading of a couple of cars of cinders?

Mr. BALDWIN. I think that stuck in Mr. Felton's mind more than anything else, and I think it did prejudice his feeling about it.

Senator JONES. Right there, Senator Johnson, will you pardon an interruption? This description that you have just given of going through the yard, is that a correct description of the investigation made by Mr. Piez at Hog Island, on which he based his report?

Mr. BALDWIN. Mr. Piez might have been there some time without my knowledge; that is the only time that I know about.

Senator VARDAMAN. May not Mr. Felton also have been there at some other time?

Mr. BALDWIN. Yes, sir; he may have been there at some other time. The report was made soon after this visit, however.

Senator JOHNSON. Well, the impression I had was that you said the report was made as a result of this two-hour trip.

Mr. BALDWIN. No; I say that was the only trip I know about, and the report was made soon after that trip.

Senator JONES. Well, when was this visit made that you describe? When did that occur?

Mr. BALDWIN. The date?

Senator JONES. Yes.

Mr. BALDWIN. I am not good at remembering dates.

Senator JONES. Well, about when?

Mr. BALDWIN. I should say about a week before he filed his report—whatever the date of that is.

Senator RANSDELL. The report is dated January 22, 1918.

Mr. BALDWIN. January 22; then I should say a week or ten days before that.

Senator JONES. Then you think it was about the middle of January that he was there upon this visit that you have described?

Mr. BALDWIN. Yes, sir; he may have been there a great many times, but I do not know about that.

Senator JOHNSON. Do you not think that Hog Island was too great an undertaking?

Mr. BALDWIN. No, sir. We have the same absolute confidence in our ability to carry that through, as we told the Shipping Board today; and we base it upon our experience in the past four months.

Senator JOHNSON. Mr. Felton, in his report, says:

> I watched the men congregated at different points around the yard, and I should estimate that possibly between 5 and 10 were working out of every gang of 100. I never in my life saw such idleness.

Was he in error in that statement?

Mr. BALDWIN. As I say, he was most of the time at lunch, or else the men were at lunch; and in the drive out of the yard he saw them in their lunch time.

Senator JOHNSON. And you think he saw them in idleness because they were at lunch?

Mr. BALDWIN. I think he was there at a wrong time to see them at work.

Senator VARDAMAN. May he not have obtained this impression at some other time?

Mr. BALDWIN. Oh, yes; he may have done so; I do not know.

Senator VARDAMAN. So that you can not say that the things he said he saw there was not the facts?

Mr. BALDWIN. I utterly disagree with him in his conclusions. Now, our own figures are that those men are 60 per cent efficient; that is, they do 60 per cent of the labor that you expect to get from people in ordinary commercial practice. And that is about as hard and about as far as we can drive them.

Senator JOHNSON. You saw Admiral Rousseau's memorandum submitted to Mr. Piez about the yard, did you not?

Mr. BALDWIN. Which one?

Senator JOHNSON. This is dated January 18. [Reading:]

These figures show that up to the present time the work has been costing several times the estimated unit cost. From reports which have been received during the past three months from Philadelphia in regard to the methods pursued by our agents, the American International Shipbuilding Corporation, I can not but feel that a considerable part of this excessive cost is due to the fact that our agents have no incentive——

Mr. BALDWIN. "No incentive," except they are trying to build those ships, because we have got children over there, Senator. I have got a boy there. Do you think I am going to play the fool in this thing and not try to get that thing done? No, sir. There are plenty of others just the same way. We are not doing this for money.

Senator JOHNSON. Some of you are, are you not?

Mr. BALDWIN. No, sir; no, sir; we are not doing it for money.

Senator JOHNSON. You are not doing it for money, but you have some $6,000,000 or $7,000,000 coming to you out the this contract. How do you explain that if you are not doing it for money?

Mr. BALDWIN. Because you can not keep a corporation alive on patriotism. You can keep the individual going on that basis, but you can not keep a corporation going on it. They have got to have dividends; they are stockholders.

Senator JOHNSON. Are the directors the principal stockholdes of these corporations?

Mr. BALDWIN. No; I do not think so. I have not a stock list in my mind, but the stock is scattered over several thousand people, all over the country.

Senator JOHNSON. Are not all of those stockholders, these gentlemen who have been named as directors?

Mr. BALDWIN. Not necessarily.

Senator JOHNSON. Do you not know?

Mr. BALDWIN. No, sir; I do not know.

Senator JOHNSON. Do you not know sufficiently about the corporation to know your largest stockholders?

Mr. BALDWIN. You can not tell by a corporation list what these stockholders are. They may be recorded in one man's name or another.

Senator JOHNSON. The question I asked you is, do you not know who are the largest stockholders of your corporation?

Mr. BALDWIN. No, sir; I do not, nor does any other man.

Senator JOHNSON. Do you know any of the large stockholders?

Mr. BALDWIN. Yes, I do.

Senator JOHNSON. Name me some of them.

Mr. BALDWIN. Messrs. Stone & Webster are stockholders; Mr. Vanderlip is a large stockholder.

Senator VARDAMAN. What kind of a stockholder?

Mr. BALDWIN. I can not answer that sort of a question, because I do not know; nobody knows.

Senator JOHNSON. The reason I am asking you is because of what you just said, that you do not need any money. You do not need $6,000,000 or $7,000,000 to keep those gentlemen going, do you?

Mr. BALDWIN. Senator, when you talk of $6,000,000 and $7,000,000 you forget that this is a $200,000,000 job, and those $6,000,000 only represent 3 per cent on this job.

Senator JOHNSON. The point of it is that you said you were not doing it for money.

Mr. BALDWIN. I said I was not doing it for money; I said the other men in it were not doing it for money. The corporations are doing it for a reasonable profit.

Senator JOHNSON. And you said you could not keep this corporation going unless you do pay the stockholders dividends.

Mr. BALDWIN. Unless they are paid dividends.

Senator JOHNSON. All right. These gentlemen would keep going very thoroughly and very well without any more dividends.

Mr. BALDWIN. Maybe some of them would.

Senator JOHNSON. All of them that you know would, would they not?

Mr. BALDWIN. No, sir; all of them I know would not.

Senator JOHNSON. All of those you have named, at any rate. And I will ask you now, again, for the names of any other large stockholders that you know.

Mr. BALDWIN. I can not give you the names of the stockholders.

Senator JOHNSON. Then those you have named could get along very well—worry along, indeed, without any great profit from the Government, could they not?

Mr. BALDWIN. They are not getting any great profit off the Government.

Senator JOHNSON. They have a small profit?

Mr. BALDWIN. Three and three-tenths per cent on the job, of which you give back half in excess profits, is not large compensation.

Senator JOHNSON. They could not get along without this small profit?

Senator NELSON (interposing). Have you invested a dollar of your own money in it?

Mr. BALDWIN. We are devoting all of our time and thought to it—three great corporations.

Senator NELSON. Three per cent on wind. Do you want 3 per cent for holding up a sign reading: "This thing is run by the International Shipbuilding Corporation. The Government pays all the bills"?

Mr. BALDWIN. If this job does not kill a half dozen men who are trying to put it through, I will be very wrong. They are throwing into it most earnest possible effort, Senator.

Senator JOHNSON. The only reason I pursued that inquiry was because of what you said. With you I have sympathy, because you have a boy over there. I have a boy, and that is why I am pursuing this inquiry, because it is not just to your boy and it is not just to my boy that any man that already is very, very rich shall out of this crisis be making any undue profit from the Government.

Mr. BALDWIN. I do not think any man is doing it.

Senator JOHNSON. I get back to some of the other things that are in this particular report. I read you just now a part of Admiral Rousseau's report, and I think that our discussion occurred when I read the word "incentive." It was Admiral Rousseau's word, not mine. He is unfair in that—in his suggestion that apparently the "agents have no incentive under the present contract to complete the plant within their original estimate of $21,000,000."

Mr. BALDWIN. I think he is.

Senator JOHNSON. He proceeds by saying:

> The situation is, in my opinion, a grave one from the financial end, and it would seem to me that radical retrenchment as regards unit cost should be effected by our agents at once, or they should be offered the alternative of being required to accept a supplemental agreement that would give the Emergency Fleet Corporation a more direct control over the way in which the money is being spent, or we should require the American International Corporation to agree to a limit of plant cost for the Hog Island work, with the proviso that they would receive a portion of any savings therefrom, and that the Emergency Fleet Corporation might share with them on some percentage basis any excessive cost over the limit fixed.

Do you agree with that particular paragraph of Admiral Rousseau?

Mr. BALDWIN. I do not see quite how it was possible to change the situation at the moment.

Senator JOHNSON. He concluded his report by saying:

> In my opinion the costs given in the accompanying papers can not be defended or explained satisfactorily.

I presume you have read the report of the course of this investigation, have you not?

Mr. BALDWIN. I have read some of the testimony; yes, sir.

Senator JOHNSON. How many of you gentlemen would be willing to do this work without any suggestion of profit at all?

Mr. BALDWIN. We could not do it.

Senator JOHNSON. You could not do it?

Mr. BALDWIN. We could not do it, and no kind of an organization could. You could not put a force together on that basis. You have got to have the organization, the force of an organization that has been built up by long years' experience if you are going to be able to handle it.

Senator JOHNSON. But the Government is paying all the employees of those various corporations?

Mr. BALDWIN. But you must have them in order to be able to furnish them to the Government.

Senator JOHNSON. All right. Now, they are there. You had them, did you not, when the contract was made?

Mr. BALDWIN. We had some of them.

Senator JOHNSON. Now, having them, the Government undertook to pay all of them, and pay them all very good salaries indeed, according to the list that has been submitted here. Do you mean to

that the Government could not continue to do that work without king a profit for the various corporations?

Mr. BALDWIN. I do not know what the Government can do, sir. nly know what it has done in a great many cases.

Senator JOHNSON. And you know that it would be impossible for y of these corporations to accomplish that result without their ing a profit?

Mr. BALDWIN. I do not see how a corporation, whose existence is sed on securing a reasonable dividend to its stockholders, can conue in existence and continue to hold its organization together so at it is able to do the work unless it has a reasonable profit for its sk.

Senator JOHNSON. Will the results of this particular contract be stributed to more corporations than the American International?

Mr. BALDWIN. Yes: it goes—the fee that is paid will be distributed tween the three different corporations.

Senator JOHNSON. And those three, will you state, if you please?

Mr. BALDWIN. The American International, the Stone & Webster, nd the New York Shipbuilding Corporation. Those are the three at will share in the fee that is paid.

Senator JOHNSON. Are there any others?

Mr. BALDWIN. No, sir.

Senator JOHNSON. Did you read Commander Reed's report, in hich he says:

It is believed that the costs given are below rather than the actual, as it is robable that items of cost have been omitted rather than extraneous items serted.

Mr. BALDWIN. I remember that phrase in it: yes, sir.

Senator JOHNSON. That is correct?

Mr. BALDWIN. Why, possibly it may be, or it may not: I do not hink I can give a specific answer to that question.

Senator JOHNSON. How much of the work of the construction of he yards has thus far been completed?

Mr. BALDWIN. I can not give you that in percentage. I can only ay that out of 50 ways that 12 of them are ready for the keels of the essels, and that all the work in the yard is at a stage where it will e ahead of the steel, and Admiral Bowles is now discussing with s the question as to whether we ought to slow up our whole scheme ecause the steel can not be possibly gotten ready as soon as we will e ready for it.

Senator JOHNSON. What I am trying to arrive at is what proporon of the work that has been done there, exclusive of shipbuilding self, so that we may arrive, if we can, at the amount that it will ltimately take to complete the yard.

Mr. BALDWIN. That would be very difficult to give without going rough and making a very careful statement of the whole thing, to ow you the definite percentage of the completion of each particular ing.

Senator JOHNSON. If you can not do it, all right; but could you pproximate it?

Mr. BALDWIN. No, sir; I could not.

Senator JOHNSON. That would be an impossibility?

Mr. BALDWIN. It would be an impossibility without a complete udy of the whole situation for that purpose.

Senator JOHNSON. How much of the work, so far as the shi concerned, is done outside of the yard and how much inside?

Mr. BALDWIN. That is hard to say, too. I think I could pe only answer you that by telling you how it is being done and k form your own conclusions.

Senator JOHNSON. I do not care particularly for that unles wish to, Mr. Baldwin.

Mr. BALDWIN. No; I do not.

Senator JOHNSON. What I wanted to form, if I could, was a mate. I have asked several witnesses the fact, and they have more or less indefinite, whether in building fabricated ships, y 50 per cent of the work on the ships inside and there is 50 pe done outside in the way of plates and the like.

Mr. BALDWIN. I should think there was a great deal more 50 per cent outside; a great deal more.

Senator JOHNSON. Would 60 to 40 express it?

Mr. BALDWIN. I do not know, but a great deal more than cent.

Senator JOHNSON. It would be more than half?

Mr. BALDWIN. It would, as correct as I could be.

Senator JOHNSON. You spoke of Admiral Capps's delay—no tiously—I do not mean that as a pun; but you spoke of the de signing the contract; is it not a fact that that was due to the tiations concerning the compensation?

Mr. BALDWIN. We were willing at the very beginning with ral Capps to accept the same compensation that we ultimately a upon. I do not think that is a fair statement.

Senator JOHNSON. Was not the original figure that you nam Gen. Goethals greater than that you entered into with Ad Capps?

Mr. BALDWIN. As I stated, 6 per cent—we entered into an ment with Admiral Capps and 4 per cent on the ships, which about 3.3 per cent on the whole job.

Senator JOHNSON. Do you say that in the very beginnin agreed to make those terms with Admiral Capps?

Mr. BALDWIN. We would have agreed.

Senator JOHNSON. You say you "would have agreed." B understanding of it——

Mr. BALDWIN (interposing). Our statement to Admiral Ca the beginning was—

You can write your contract. You write it out, and we will tell you w we can do it if you will let us know what you want us to do.

Senator JOHNSON. Oh, yes. But that is a very different from saying you agreed to anything, in terms, that he woul gest. You told him that you would see whether or not you agree to do it?

Mr. BALDWIN. And if he had presented the next day the co as ultimately presented we would have accepted it that day.

Senator JOHNSON. It has been stated to me, perhaps inaccu that the question first arose over the compensation, and that th pensation was not agreed upon, until September, when the co was executed, and that between the time when the contract into Admiral Capps and the time of its execution, he was i

ting not only the details but negotiating with you gentlemen upon e amount that was to be paid.

Mr. BALDWIN. That is hardly inconsistent with my statement, nator.

Senator JOHNSON. You say it is not inconsistent with your statement?

Mr. BALDWIN. No.

Senator JOHNSON. Then, the fact of the matter has been that the gotiations were over the price to be paid.

Mr. BALDWIN. No; the negotiations were not over the price to be aid, but were over the terms of the contract. When the terms of e contract were determined, then the price was a very simple matr and was agreed on instantaneously, practically.

Senator JOHNSON. Do you remember what you asked at first?

Mr. BALDWIN. The original agreement with Gen. Goethals was 6 er cent.

Senator JOHNSON. Do you remember that you asked a greater sum an that in the beginning?

Mr. BALDWIN. We never asked a greater sum than that in the eginning.

Senator JOHNSON. Do you remember that you suggested 10 per ent?

Mr. BALDWIN. We told him that ordinarily in a shipyard that the sual compensation for shipbuilding of that kind was 10 per cent; at was the ordinary compensation in all yards.

Senator JOHNSON. And you started concerning the compensation t 10 per cent, did you not?

Mr. BALDWIN. We never insisted on it.

Senator JOHNSON. I am not saying that you insisted on it. You id that that was the compensation.

Mr. BALDWIN. Merely made the statement that that was the comercial compensation, which it is.

Senator JOHNSON. Had you reached a final agreement with Gen. oethals by which you were to have 6 per cent?

Mr. BALDWIN. Yes.

Senator JOHNSON. And then Admiral Capps in his negotiations ut it down finally to something like 4 per cent?

Mr. BALDWIN. Four per cent on the ships and nothing on the ards—3.3 per cent. Keep that figure in your mind, Senator.

Senator JOHNSON. Oh, well, 3.3 per cent.

Mr. BALDWIN. That is the ultimate thing on the whole job.

Senator VARDAMAN. Will you let me ask a question right there?

Senator JOHNSON. Yes.

Senator VARDAMAN. Are there any other concessions or fees paid y the Government on the cost of construction except that?

Mr. BALDWIN. To us or any of us?

Senator VARDAMAN. Your company, I understand, was to construct he plant. Now, does the Government——

Mr. BALDWN (interposing). We were not, as constructors, to do all.

Senator VARDAMAN. You were to do that without commission. It being constructed now under your direction.

Mr. BALDWIN. Yes.

Senator VARDAMAN. And you have——

Mr. BALDWIN (interposing). We get nothing out of the yard.

Senator VARDAMAN. Not a thing?

Mr. BALDWIN. Not a cent; not a nickel.

Senator VARDAMAN. Does anybody get anything?

Mr. BALDWIN. Not connected with us. The contractors get their profit for their work, but we get nothing out of it.

Senator VARDAMAN. Are there any members of the parent company interested in any of the subcontracts?

Mr. BALDWIN. The only ones I know of—the firm of Holbrook, Cabot & Rollins is a firm of contractors who are building a dry dock in Massachusetts, who are building a good deal of subway in New York, one of our very largest contracting firms, of which Mr. Holbrook is the vice president of the American International Company for Russia. He has no connection with its ordinary business affairs of any kind, and he has, so far as I know, I don't even know that he owns any stock in it.

Senator VARDAMAN. None of your stockholders are interested in these subcontracts at all?

Mr. BALDWIN. Let me be very clear. There is one, the firm of Ingersoll, Rand & Co., which was a large firm. I think that Mr. Grace, who is one of our directors, is also a director in that. I presume he owns stock in both corporations. They have a contract for an air plant, drills, and things of that kind. They are the largest concern of that kind in the country. Those are the only two that I can recollect who have any stock whatsoever.

Senator VARDAMAN. Are they the only two you recall?

Mr. BALDWIN. They are the only two I recall.

Senator VARDAMAN. Have you investigated that?

Mr. BALDWIN. I have looked over the list. I looked it over yesterday morning.

Senator VARDAMAN. Do you think it is altogether fair to the Government, when your company agreed to construct the plant without a commission, to permit the subletting of contracts to members of the parent company on which profits are paid by the Government?

Mr. BALDWIN. Those people are not members of the parent company in any sense that would prevent anything of that kind. Mr. Holbrook, as I say, has no connection.

Senator VARDAMAN. They have done so.

Mr. BALDWIN. Mr. Holbrook has no connection with our company officially of any kind, except that he was the vice president for certain jobs in Russia. He is the head of one of the largest contracting concerns in the country.

Senator VARDAMAN. Who is the United States going to pay?

Mr. BALDWIN. Pay on that work he is doing?

Senator VARDAMAN. I mean, what commissions will be paid by the Government upon this construction, which was to be done without any commissions to be paid under the original contract?

Mr. BALDWIN. The subcontractors are paid on their work. They are paid 5 per cent, a fixed fee equivalent to 5 per cent on their work.

Senator VARDAMAN. That costs the Government of the United States quite as much as if the Government had paid it to you. You say you are going to receive only about 3.3 per cent profit on this entire investment.

Mr. BALDWIN. Senator, you could not get your equipment, and all ıat sort of thing, the many hundreds of thousands of dollars of ıuipment you have got to have; that is what those men furnish, ıey furnish organization.

Senator VARDAMAN. They do not furnish anything. The Govern- ıent of the United States furnishes everything and pays all that ıpense. They do not furnish anything.

Mr. BALDWIN. The contractors do furnish it.

Senator VARDAMAN. It is not the Government?

Mr. BALDWIN. They furnish it.

Senator VARDAMAN. They furnish it?

Mr. BALDWIN. They furnish it, and the Government pays them ır it through us.

Senator VARDAMAN. And in addition to that pays them a com- ıission.

Mr. BALDWIN. Why, no. They pay the subcontractors. The cost f the work plus a commission to the subcontractor of 5 per cent; ıat is all they get.

Senator VARDAMAN. I understand that.

Mr. BALDWIN. That is all they get. Ordinarily a contractor gets or 8 per cent in ordinary business. They are doing this work— ll this work is being done cheaper for the Government than for any ırivate concern.

Senator VARDAMAN. It is costing the Government a great deal more han it would cost any private concern.

Mr. BALDWIN. Oh, no; not under these conditions.

Senator NELSON. Mr. Baldwin, will you please enumerate your fficers connected with this shipbuilding work, who are working at t that are paid by the corporation and not by the Government?

Mr. BALDWIN. Paid by the American-International Corporation?

Senator NELSON. Yes; or the Shipbuilding Corporation, both com- ıined—who are the officers that you pay that are connected with his, and what are their salaries?

Mr. BALDWIN. I should have to give you a long list, and I can not ;ive that out of memory. There are a great many of them.

Senator NELSON. Outside of those the Government is paying?

Mr. BALDWIN. There are a great many of them outside of those ›aid by the Government.

Senator NELSON. Those who are in charge of the direction at Hog ıland?

Mr. BALDWIN. People who have direct supervision are the people ınder Mr. Robinson: they are the men on the job: they are all paid ›y the Government.

Senator NELSON. How many men are on the job that the corpora- ıon pays and the Government does not pay?

Mr. BALDWIN. Our people who go down there are only there oc- ıasionally; they are not the men who are actually engaged in it.

Senator NELSON. Mr. Baldwin, those men and yourself that are ıot on the Government pay roll, that go down there—that is all he capital you have invested in it, is it not, and if you got 3 per ent on your capital would you not get a good compensation?

Mr. BALDWIN. Senator, it took $50,000,000 of capital to build up his organization that is doing this work.

Senator RANSDELL. If the Senator will permit me to break in, I would like to ask you this question—because it is not clear in my mind, because you were interrupted more or less when you attempted to explain it: Will you not please tell us what your company or companies give to the Government in consideration for the 3.3 per cent which the Government is going to pay you for the services performed by you—what you do?

Mr. BALDWIN. I should be very glad to.

Senator RANSDELL. Explain that just as closely as you can.

Mr. BALDWIN. An ordinary job of constructing a building or constructing a power plant or canal or any industrial undertaking is to employ an engineering firm that has an organization, who are able to work out all the plans, who are able to furnish the supervising people to conduct and to direct the work, to furnish the ability to handle the job and to design it and plan it and supervise it, and work it all out. That compensation is ordinarily about 7½ per cent on the task. That is the work undertaken by the Stone & Webster organization for us and for the Government in this particular work. The particular part that the New York Shipbuilding Co. does was to look after the designing of the boat, to correct it in all of its details, to work out by the templets and all the modifications of it, and it was thrown at us as a sort of a general idea for us to work out. They furnished that: they furnished the technical knowledge and criticism to see that that boat is right, and to see that it is a good boat and put the seal of their approval on it. No two corporations of that sort would have dared to undertake a job of this magnitude unless they had back of them even some greater power that they could rely on if it came to any emergency or difficulty. The main reason why we were willing to take this job, which was discussed at a meeting of our directors, was because the men composing our board are the men engaged in large industrial undertakings, and they said, "We stand ready to stand by you on anything that happens. Go ahead and do your work." You have got two things, you have an engineering firm, who ordinarily charge 7½ per cent for work for which they are now getting 3.3 per cent; you have a shipbuilding concern who ordinarily make a profit of 10 per cent.

Senator NELSON. That is where they build with their own money and in their own shipyard?

Mr. BALDWIN. Yes.

Senator NELSON. You have no right to put that in and call it 10 per cent, where the Government builds the yard and pays for everything. What sense is there in putting in 10 per cent and using that as an argument?

Mr. BALDWIN. That is where they put it in.

Senator NELSON. Then you claim 10 per cent, and set that up as an example of cheapness.

Mr. BALDWIN. I should judge from the way you are proceeding that you think I am a desperate thief and a criminal. [Laughter.]

Senator NELSON. No; I suggest you might think I was a fool.

Mr. BALDWIN. No; I know I never suggested that.

Senator RANSDELL. Go ahead with your explanation. I am getting more light on it than I had before.

Mr. BALDWIN. That is the real work that is being done by this ganization. They have taken their men; they have taken them om their work which they could do with far more profit than this d they have put them on this job. The Stone & Webster people ve got the bulk of all of their best men right on this job.

Senator NELSON. Yes; but are they not paid by the Government?

Mr. BALDWIN. They are paid by the Government; yes. But it their organization. It has taken them 20 years to build up that rganization. The Government could not build up that organiza- ion. Do you not think it costs money to build an organization?

Senator RANSDELL. No.

Mr. BALDWIN. It did not cost? Have you ever built one?

Senator RANSDELL. Mr. Baldwin, as I understand. the Govern- ent is merely paying a per diem, and not giving any percentage xcept on the whole.

Mr. BALDWIN. The only payment the Government makes is the ost of the work plus the percentage they pay as a fee.

Senator RANSDELL. The Government, if I understand you cor- ectly, takes the principal men of Stone & Webster and these other eople, and pays them a daily wage, and those men are barred by eir employment for the Government from opportunity to engage some other business from which they might make very large rofits, if they were in the ordinary vocations that the firm engaged Is that your idea?

Mr. BALDWIN. They could make more money if engaged in other ocations.

Senator NELSON. I find here in this schedule R. L. Hunt, publicity sistant, $666.66 a month; and then I find D. T. Pierce, publicity anager, $833 a month; and Thomas B. Reed, publicity assistant, 500 a month. Those three names mean $2,000 a month. Was that part of the skill Stone & Webster turned over to the Government?

Mr. BALDWIN. They were a part of the organization put together y Stone & Webster for this purpose. The reason for the publicity as thoroughly discussed with the Shipping Board.

Senator NELSON. Do you not know we had specialists and experts. ike Mr. Creel and others, here in Washington, and could get along ithout the help of your publicity organization? [Laughter.]

Mr. BALDWIN. The Shipping Board did not seem to think so, be- cause we discovered we have the necessity for such publicity to get the labor to work; those men were engaged in getting the labor to work.

Senator JOHNSON. The Stone & Webster organization does just what, if you please?

Mr. BALDWIN. They are engineers.

Senator JOHNSON. And they furnish the engineering ability under this contract?

Mr. BALDWIN. Yes, sir; engineering and the supervising, both. It is more than engineering they do; they supervise and furnish the organization.

Senator JOHNSON. Pursuing the inquiry of Senator Ransdell— that is, those men who are on the work in that engineering depart- ment are paid regular salaries by the Government, whatever they may be?

Mr. BALDWIN. You ask me that question?

Senator JOHNSON. Yes.

Mr. BALDWIN. Yes.

Senator JOHNSON. All right. Do you know whether or not there has been a contract entered into with Stone & Webster by which their engineering force are paid as consulting engineers?

Mr. BALDWIN. No; the only agreement with Stone & Webster is that whatever the fee——

Senator JOHNSON (interposing). What I am referring to is something that was put into the testimony here very recently—that a contract has been made with Stone & Webster by which their highly trained skilled men, when utilized at this plant, will be paid 100 per cent more, based upon, perhaps, an accurate calculation, than they receive as regular compensation from Stone & Webster?

Mr. BALDWIN. I do not think so. I think if you will check that list over you will see that is untrue.

Senator JOHNSON. Do you know of any such agreement?

Mr. BALDWIN. There are no other payments to those men. The men on the list are getting the payments shown on the list.

Senator JOHNSON. Do you know of any contract that has been entered into within the last three months with Stone & Webster for employment of any of its men?

Mr. BALDWIN. Nothing except the original contract that we agreed to with them, by which the three companies share in the fee.

Senator JOHNSON. I am not referring to that.

Mr. BALDWIN. That is all; there is not any other contract that I know of. I do not think there is any other. I would know it if there were.

Senator JOHNSON. That is what I was going to ask you, if you know it.

Mr. BALDWIN. I would know it.

Senator JOHNSON. We are safe in assuming there is no contract in existence with Stone & Webster by which their engineering ability is to be compensated in addition to the compensation that may be stated in the contract?

Mr. BALDWIN. None, except the original contract by which the three corporations share the ultimate fee. There is no other agreement in which the American International is concerned, and I would know if there were.

Senator JOHNSON. I may take that as conclusive and positive?

Mr. BALDWIN. I think you may.

Senator JOHNSON. Somebody testified that there was a contract of that sort.

Senator VARDAMAN. Mr. Towle testified to it, and Commander Reed testified that he approved the contract.

Senator JOHNSON. Yes: I think that is correct.

Mr. BALDWIN. There is some mistake: I do not know how it arose.

Senator JONES. Let me make this suggestion, Mr. Baldwin: This is alleged to be a contract by the American International Corporation as the agent of the Emergency Fleet Corporation, and the Emergency Fleet Corporation pays this 100 per cent additional. That was what it was.

Mr. BALDWIN. I do not think so.

Senator JOHNSON. Yes; that is correct. The statement is that the American International Corporation is the agent of the Govern-

ent—that is, of the Emergency Fleet Corporation—and entered to a contract with Stone & Webster, by which they utilized certain of tone & Webster's skilled engineers in an advisory capacity, and they ave paid those engineers a compensation; that is, the Government aid that compensation.

Mr. BALDWIN. I see what you are driving at now. All of the men ith the Stone & Webster organization are now working on this job. hey have other men all over the country working. Every now and hen those men, who are experts in different lines, and when some articular question comes up which a particular man in that organization is able to answer more definitely and better than anybody else, hey are called in. It would not do to put that man on the permanent pay roll, because you do not need his services all the time. All ou need of him is possibly one or two days' work, something of that kind, to get all that he has, all that he can give on this particular subject. There is an agreement—that is a part of the original agreement that I speak of; it is not a separate contract at all, it is a part of the original agreement—that Stone & Webster will furnish on demand, particularly when working for short times for particular purposes, and those men are paid in accordance with the custom of the engineering profession: they are paid twice pay-roll costs.

Senator JOHNSON. You say that that is a part of the original agreement?

Mr. BALDWIN. That is a part of the original agreement.

Senator JOHNSON. Now, what agreement do you refer to when you say the "original agreement"?

Mr. BALDWIN. I referred to an agreement between Stone & Webster and the American International Corporation and the American International Shipbuilding Corporation which states the duties of Stone & Webster in the task and the final division of the fee which should result.

Senator JOHNSON. Will you present a copy of that agreement to the committee for the record?

Mr. BALDWIN. I have not it here.

Senator JOHNSON. I know that, but I mean subsequently, with some other information you were about to furnish?

Mr. BALDWIN. The list of directors, you wanted?

Senator JOHNSON. Thank you, yes; the agreement being, as I understand it, the agreement between the three subsidiary corporations?

Mr. BALDWIN. No: the agreement between Stone & Webster and the American International Corporation, under which the American International Shipbuilding Corporation was organized to do the work.

(The copy of contract referred to was subsequently furnished by Mr. Baldwin and is here printed in full as follows:)

AMERICAN INTERNATIONAL CORPORATION,
New York, February 15, 1918.

Mr. D. C. THORNTON,
Assistant Clerk Committee on Commerce,
United States Senate, Washington, D. C.

DEAR SIR: In compliance with my promises to the Committee on Commerce, I herewith submit the names of the officers and directors of the companies named below:

American International Corporation.—J. Ogden Armour, George J. Baldwin, Charles A. Coffin, William E. Corey, Robert Dollar, Pierre S. du Pont,

Franklin, Joseph P. Grace, Robert F. Herrick, Otto H. Kahn, Robert S. Lovett, Henry S. Pritchett, Percy A. Rockefeller, John D. Ryan, William L. Saunders, James A. Stillman, Charles A. Stone, Guy E. Tripp, Theodore N. Vail, Frank A. Vanderlip, Edwin S. Webster, A. H. Wiggin, Beekman Winthrop, and William Woodward.

I call attention to the fact that more than three-fifths of the directors of American International Corporation are engaged in war work for the Government, most of them giving their entire time, with no compensation of any kind beyond their feeling of personal satisfaction in doing their share.

American International Shipbuilding Corporation.—George J. Baldwin, Dwight P. Robinson, Howard L. Rogers, Harris D. H. Connick, George O. Muhlfeld, and Marvin A. Neeland.

American International Terminals Corporation.—Edwin S. Webster, W. H. Lyford, George J. Baldwin, P. V. Davis, W. S. Kies, Charles E. Mitchell, F. P. Royce, Oscar E. Stevens, and R. P. Tinsley.

I am inclosing to you copy of the contract requested, showing the agreement between the firm of Messrs. Stone & Webster and American International Corporation. I trust this information completes my testimony in accordance with the desires of the committee.

Yours, very truly,

G. J. BALDWIN,
Senior Vice President.

AGREEMENT BETWEEN AMERICAN INTERNATIONAL CORPORATION, AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, AND STONE & WEBSTER, DATED DECEMBER 12, 1917.

Agreement made this 12th day of December, 1917, between American International Corporation, a corporation of New York (hereinafter called "International Corporation"), party of the first part, American International Shipbuilding Corporation, a corporation of Delaware (hereinafter called the "Shipbuilding Corporation"), party of the second part, and Stone & Webster, a partnership, parties of the third part, witnesseth:

Whereas the International Corporation has heretofore entered into a contract dated September 13, 1917, with United States Shipping Board Emergency Fleet Corporation (hereinafter called the "Fleet Corporation"), representing the United States of America, providing for the building of a shipyard on certain real estate of the International Corporation at Hog Island, near Philadelphia, Pa., and for the construction at such shipyard of 50 or more steel cargo vessels in said contract mentioned; and

Whereas by said contract the International Corporation is to be paid the actual cost as defined therein of the building of said shipyard and of the construction of said vessels and, in addition, a fee for each vessel constructed as provided in said contract; and

Whereas the International Corporation, with the consent of the Fleet Corporation and by contract dated September 28, 1917, employed the Shipbuilding Corporation as agent for the purpose of carrying out the undertaking contemplated by said contract of September 13, 1917, all as more fully provided in such agency contract of September 28, 1917; and

Whereas the International Corporation and the Shipbuilding Corporation as the agency aforesaid desire to engage the firm of Stone & Webster for the organization, performance, and the carrying out upon the terms hereinafter set forth of the undertaking and work as contemplated by said contract of September 13, 1917, or any modifications thereof or substitutions therefor which may hereafter be entered into, or by any other contract which may hereafter be entered into, with the Fleet Corporation, representing the United States of America, for the accomplishment of such undertaking and the work of construction of vessels substantially in accordance with the plan as the same is originally set forth and contemplated by said contract of September 13, 1917:

Now, therefore, in consideration of the agreements herein contained, the parties hereto agree as follows:

1. Stone & Webster agree to furnish to the Shipbuilding Corporation the organization for the prosecution of the work undertaken and to perform and carry out through the agency of the Shipbuilding Corporation the work under said contract of September 13, 1917, delegating certain persons in their employ

o serve upon the board of directors, the executive committee, and as executive officers of the Shipbuilding Corporation, delegating a general manager, and securing and furnishing such persons as may be needed or required in the carrying out of the work, all as more fully set out hereinafter.

2. Stone & Webster will make no charge for services rendered by the partners in the firm of Stone & Webster, except in the single case of Mr. Robinson, of said firm, who has been made president of the Shipbuilding Corporation, and who will devote the major portion of his time to the carrying out of this undertaking. For the services of Mr. Robinson or of such member of the firm of Stone & Webster as shall succeed him in active charge of the work and as president of the Shipbuilding Corporation, the Shipbuilding Corporation will pay Stone & Webster, when and as the Fleet Corporaton shall make payments to the International Corporation on account of fees under said contract of September 13, 1917, or modifications thereof or substitutions therefor, at the rate of $50,000 per year from September 15, 1917.

3. Stone & Webster have detailed other representatives to serve as executive officers of the Shipbuilding Corporation. For these representatives the Shipbuilding Corporation will pay Stone & Webster, when and as the Fleet Corporation shall make payments on account of fees as aforesaid, at the following rates:

G. O. Muhlfeld, or such member of Stone & Webster's organization as they shall designate to succeed him in performing services for the Shipbuilding Corporation, $25,000 per year.

H. L. Rogers, or such member of Stone & Webster's organization as they shall designate to succeed him in performing services for the Shipbuilding Corporation, $15,000 per year.

G. C. England, or such member of Stone & Webster's organization as they shall designate to succeed him in performing services for the Shipbuilding Corporation, $10,000 per year.

All from September 15, 1917.

4. Stone & Webster have detailed a representative to act as general manager of the Shipbuilding Corporation and other representatives who will devote their time for considerable and consecutive periods of this undertaking. They further agree to detail additional representatives if the work requires [illegible] suitable men are available.

All men so detailed who are devoting their time exclusively to this work shall be placed on the pay rolls of the Shipbuilding Corporation, [illegible] tion to their salaries, which shall be paid to them directly by the Shipbuilding Corporation, the Shipbuilding Corporation shall pay Stone & Webster, [illegible] as the Fleet Corporation shall make payments [illegible] an amount equal to the total [illegible] work to such of these men as receive $[illegible] ordinarily carried on the Boston office [illegible] substantially the cost to Stone & Webster of [illegible] overhead charges, the [illegible] & Webster for their overhead [illegible] parties hereto as properly part of the [illegible] Corporation. The total amount [illegible] overhead charges under this [illegible] gregate a sum at the rate of $10[illegible]

5. Stone & Webster agree at the [illegible] furnish as may be necessary for the [illegible] its construction, [illegible] this project. For the services of [illegible] Boston, Philadelphia, or other places [illegible] Stone & Webster monthly [illegible] by Stone & Webster for the time [illegible] estimated and agreed to be the [illegible] employed on the work.

6. The International Corporation [illegible] by its executive officers except [illegible] dent, who is to serve on the board of directors [illegible] and Mr. Connick, its vice president, [illegible] the executive committee, and as vice president [illegible] tion. For the services of Mr. Baldwin or of such person as the International Corporation shall designate as his successor, the Shipbuilding Corporat

pay the International Corporation at the rate of $50,000 per year from tember 15, 1917, and for the services of Mr. Connick or of such person a to be made when and as the Fleet Corporation shall make payments to the national Corporation at the rate of $25,000 per year from such date, pay to be made when and as the Fleet Corporation shall make payment to the national Corporation on account of fees as aforesaid.

7. If the International Corporation shall, at the request of the Shipbu Corporation, detail any of its representatives to devote their time for siderable and consecutive periods on the undertaking, all men so detailed are devoting their time exclusively to such work shall be placed on the rolls of the Shipbuilding Corporation, and in addition to their salaries, shall be paid to them directly by the Shipbuilding Corporation, the Ship ing Corporation shall pay to the International Corporation, when and a Fleet Corporation shall make payments on account of fees as aforesai amount equal to the total salaries paid for the time they are employed o work to such of these men as receive $5,000 per year or more and wh ordinarily carried on the pay rolls of the International Corporation, this substantially the cost to the International Corporation of such men on ac of necessary overhead charges, these payments being considered as reimb ment to the International Corporation for its overhead charges, and considered and treated by the parties hereto as properly a part of the o ing expenses of the Shipbuilding Corporation. The total amount to be to the International Corporation on account of overhead charges under paragraph shall, however, not exceed in the aggregate a sum at the ra $100,000 per year from September 15, 1917.

8. The International Corporation agrees, at the request of the Shipbui Corporation, to furnish the services of its employees to work temporari this project, if the work requires it and if suitable men are available. the services of such representatives, whether rendered in New York, delphia, or other places, the Shipbuilding Corporation shall pay to the national Corporation monthly an amount equal to twice the amount such men by the International Corporation for the time employed o work, this likewise being estimated and agreed as the cost to the Internat Corporation of men so intermittently employed on this work.

9. The parties hereto agree that Mr. Thomas W. Streeter, the treasu the International Corporation, shall be appointed auditor of the Shipbu Corporation, and that he, or such persons as he shall designate for the pu shall make a continuing audit of the accounts of the Shipbuilding Co toin, and for that purpose have at all times free access to such acc The Shipbuilding Corporation shall pay to the International Corpo monthly for the services of Mr. Streeter or of the persons whom Mr. St shall designate to perform such service on the basis mentioned in paragr

10. The Shipbuilding Corporation agrees, when and as payments sh made to the International Corporation by the Fleet Corporation on ac of fees as aforesaid, to reimburse the International Corporation and St Webster for all expenses incurred by them, or either of them, in or in c tion with the negotiation and securing of said contract with the Flee poration or incurred in or in connection with the negotiation of any mo tions of or substitutions for said contract; and also to reimburse them f other expenses (except salaries and compensation of their officers, me or employees) incurred by them, or either of them, in or in connection the carrying out of the work under said contract, including in such expenses the fees and charges of counsel, in so far as such expenses not be assumed and paid by the Fleet Corporation as part of the actua as defined in said contract of September 13, 1917, of the work there The Shipbuilding Corporation also agrees, when and as payments sh made to the International Corporation by the Fleet Corporation on acco fees as aforesaid, to reimburse the International Corporation for all sums by it to the American International Terminals Co. as commission or c sions in connection with the acquisition of said real estate at Hog Island

11. The International Corporation agrees to advance to the Shipbuildin poration from time to time, when and as required, sums of money suffic pay, when and as the same become payable, the amounts which the Shipbu Corporation has herein agreed to pay to Stone & Webster and to the In tional Corporation, in so far as moneys for such payments shall not be furn by the Fleet Corporation in payment or reimbursement of actual cost as d

n said contract of September 13, 1917; and further agrees that, in addition to the amounts to be paid to Stone & Webster by the Shipbuilding Corporation under paragraphs 2 to 5, inclusive, and paragraph 10 of this agreement, it will, when and as the Fleet Corporation shall make payments on account of fees under said contract of September 13, 1917, or any modifications thereof or substitutions therefor, pay to Stone & Webster as further compensation for their services above described an amount which shall be equal to one-half of the amount which shall be paid by the Fleet Corporation to the International Corporation on account of fees for services in the performance of the undertaking and the construction of vessels as aforesaid, after there has been deducted therefrom (*a*) all expenses incurred or paid by its agent, the Shipbuilding Corporation, in the carrying out and performance of said contract of September 13, 1917, or any modifications thereof or substitutions therefor (including all sums paid or payable to the International Corporation and to Stone & Webster under paragraphs 2 to 10, inclusive, hereof), for which the Shipbuilding Corporation does not receive compensation from the Fleet Corporation; (*b*) interest at the rate of 6 per cent per annum on all sums advanced by the International Corporation to the Shipbuilding Corporation as provided in this paragraph 11 or otherwise advanced by the International Corporation for the purposes of the undertaking from the dates of the several advances until they shall be reimbursed to the International Corporation either as part of actual cost or out of payments made by the Fleet Corporation on account of fees for services, in so far as such interest shall not be assumed and paid by the Fleet Corporation as part of the actual cost as defined in said contract of September 13, 1917, of the work thereunder; (*c*) the compensation to be paid by the International Corporation to the New York Shipbuilding Corporation for the services of the latter in connection with the carrying out and performance of the work under said contract, or any modifications thereof or substitutions therefor.

No sums in addition to those mentioned in paragraphs 2 to 5, inclusive, hereof shall be paid by the Shipbuilding Corporation to Stone & Webster for the services of members of their firm or of their organization, and no sums in addition to those mentioned in paragraphs 6 to 9, inclusive, hereof shall be paid by the Shipbuilding Corporation to the International Corporation for the services of its officers or of other members of its organization. Any bonuses paid either by the International Corporation or by Stone & Webster to any of its or their officers, members, or employees shall be assumed and borne by the party paying the same out of its or their share of said fees, unless the International Corporation and Stone & Webster shall otherwise agree from time to time.

12. In the event that the Fleet Corporation does not elect to take over the shipyard under its option, the International Corporation contemplates continuing construction of fabricated vessels at Hog Island after the completion of the vessels hereunder contemplated for Government account, and accordingly desires to retain sole control of the real estate now standing in its name. It is therefore agreed in this connection that the International Corporation will assume sole responsibility for the land and any transactions in connection therewith and shall receive the rental therefor, and said land and any transactions in connection therewith shall not enter in any way into, or be considered as part of, the actual income or expenses of the Shipbuilding Corporation for the purposes of this agreement, the intent being that such land and any and all transactions in the purchase, sale, leasing, or otherwise dealing with the same are to be for the sole account and risk of the International Corporation.

13. In case the Fleet Corporation shall cancel and terminate said contract of September 13, 1917, and shall not reinstate said contract or enter into a new contract with the International Corporation for the construction of vessels at said shipyard at Hog Island, then and in that event this contract shall also terminate: *Provided, however*, That if after the termination of said contract by the Fleet Corporation, said contract shall be reinstated or a new contract shall be entered into between the Fleet Corporation and the International Corporation covering the construction of vessels at said shipyard at Hog Island, then this contract and the employment of Stone & Webster hereunder shall continue for the purpose of carrying out said reinstated contract or said new contract.

14. This contract shall take effect as of September 15, 1917, and shall continue in force, unless sooner terminated in the manner hereinbefore provided, until the completion of the work under said agreement of September 13, 1917, be-

tween the International Corporation and the Fleet Corporation, or any modifi tions thereof or substitutions therefor.

In witness whereof the parties of the first and second parts have caused tl instrument to be executed on their behalf and their respective corporate se to be hereto affixed the day and year first above written, and the parties of t third part have signed and sealed this agreement.

AMERICAN INTERNATIONAL CORPORATION,
By GEO. J. BALDWIN, *Senior Vice President.*

Attest:
[SEAL.] CECIL PAGE, *Secretary.*

AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION.
[SEAL.] By DWIGHT P. ROBINSON, *President.*
Attest:
CHESTER M. CLARK, *Assistant Secretary.*

STONE & WEBSTER,
By RUSSELL ROBB.

Senator JOHNSON. That agreement embraced the three parties- Stone & Webster, the American International, and the New Yor Shipbuilding Corporation?

Mr. BALDWIN. No; the New York Shipbuilding Corporation wa not a party to the agreement.

Senator JOHNSON. The American International Shipbuilding Co poration was the third party?

Mr. BALDWIN. They were technically a third party, but practicall it is only the two parties: The American International Corporatic and Stone & Webster.

Senator JOHNSON. And that is the original agreement to whic you referred?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. That agreement does not deal with the compe sation to be derived under the contract, because the New York Shi building Corporation is not a party to it, does it?

Mr. BALDWIN. No; it simply states between these two parties division of what they get out of the fee; that is all that agreement.

Senator JONES. Do you claim that that does not bind the Eme gency Fleet Corporation?

Mr. BALDWIN. No; that contract has nothing to do with the Eme gency Fleet Corporation.

Senator JONES. And the Emergency Fleet Corporation is not r sponsible for any of that additional 100 per cent?

Mr. BALDWIN. No; each one of those engineers that is employe under that agreement to do the American International Shipbuil ing Corporation work; that engagement at that time has been a proved by the Emergency Fleet Corporation; they approve all wage

Senator JOHNSON. And the Emergency Fleet Corporation——

Mr. BALDWIN (interposing). The Emergency Fleet Corporatio then approves.

Senator JOHNSON. And pays?

Mr. BALDWIN. And pays; they approve and they pay.

Senator JONES. And it is a party to this?

Mr. BALDWIN. No; it is not a party to this agreement at all. Th is simply an agreement that we have with Stone & Webster that the shall, at the call of the Emergency Fleet Corporation, furnish the men.

Senator JONES. But the Emergency Fleet Corporation pays t *100 per cent* additional?

BALDWIN. That is not quite a fair way to put it—"100 per
litional."
or JONES. That is what they testified the agreement was.
BALDWIN. It is 100 per cent. That is not a fair way to put it,
it is not quite the practice. Ordinarily an engineering firm
ishing services of a man, or any expert, that man gets a
wage. Say he gets $200. They furnish that man at that
they figure that his salary cost, plus an equal amount, will
is proportion of the total cost of doing the whole business,
g the overhead, the rent, gas, and the lights, and all sorts
s. So that they let that man out at twice the pay-roll cost,
are getting back the salary of a man and the overhead costs.
rdinarily, for their profit they charge three times the pay roll
e third part of which is profit. In this case they cut out
it, because that is already paid in a fee, and they have left it
he cost of the man to them. That is what it is intended to
is not fair to say it is 100 per cent additional salary; that
t cover it.
or JOHNSON. Then, under this particular contract, Stone &
furnishes only a part of the Stone & Webster engineering
r specific work?
BALDWIN. That is quite true.
or JOHNSON. Then, whatever other part of the force you do
are required to pay for on the basis of what you have just
d?
BALDWIN. If the Emergency Fleet Corporation desire it, and
and call for it.
or JOHNSON. You call for it, [illegible] and then the bill is
d and approved by the Emergency Fleet Corporation; that
ode of procedure, is it not?
BALDWIN. We might [illegible]
e either way. [illegible]

or JOHNSON. [illegible]
need not go [illegible]
else [illegible]
hat is, this [illegible]
e & Webster [illegible]
BALDWIN. [illegible]
ing [illegible]
ars of [illegible]
[illegible]
together [illegible]
[illegible]
ng [illegible]
ly. [illegible]
[illegible]
em. [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
or [illegible]

Mr. BALDWIN. I mean the trained officers and the organization, skilled in working together, knowing each other's failings and virtues, and knowing how best to produce final results. Just as you could drive a regiment through an enemy, so you can not drive a mob through that enemy.

Senator JOHNSON. You have had to employ men?

Mr. BALDWIN. Some of them have been employed for years and years.

Senator JOHNSON. That is superintendents and the like?

Mr. BALDWIN. We have filled other men in the ranks.

Senator JOHNSON. And when you started, so far as the privates of the organization were concerned, as contradistinguished from your officers, you had to employ most of them, did you not?

Mr. BALDWIN. Of course, it takes time to build up any kind of an organization of that sort. You could not build it up; you could amplify it; you can take your organization just as we have taken the Army, and you can put in certain trained troops and bring in certain outsiders, and the thing goes along fairly well, as it would not go along if you had all outsiders.

Senator JOHNSON. Let us take the officers of your organization who were down there. What was Mr. Robinson's occupation before?

Mr. BALDWIN. I have known him for the last 20 years, and it has always been the same.

Senator JOHNSON. What was it?

Mr. BALDWIN. Chief engineer of construction of large industrial work.

Senator JOHNSON. Not of shipping?

Mr. BALDWIN. No.

Senator JOHNSON. You were connected personally with public utilities?

Mr. BALDWIN. Senator, you get a wrong slant when you ask these questions.

Senator JOHNSON. I would be glad to have you correct it.

Mr. BALDWIN. Let me see if I can not. Let me illustrate it this way. The old shipbuilding people built a ship in this way: They went to work and they had an organization that was comparable, perhaps, to a store, where, if Senator Vardaman went right into a shop and said: "I want you to build me a watch, a suit of clothes, cuff buttons, a necktie, shoes, some linen and shirts, and all that sort of thing." You would have to have a tremendous organization to build up all those things. That is the way the old shipbuilders did, and you can not do it that way now. In those days our economic conditions made it necessary. You could not build this new fleet of ships that way at all.

Senator JOHNSON. You had to have a new organization?

Mr. BALDWIN. You had to have a new idea and a new method.

Senator JOHNSON. Exactly.

Mr. BALDWIN. Where were you going to get the organization? You could not pick it out of the shipbuilders, because they were brought up in one way of doing this thing. They felt it would be very difficult to do it in any other way. The right place to go was to make it a purely contractor's job as far as possible: to eliminate the men who built an engine; for instance, to let the engine contract

ine builder: to eliminate the boilermaker, and let the boiler
to a boilermaker; in other words, to employ the whole in-
the country and to send out each part of that vessel to the
could do it best, and then let the contractor assemble those
hat is the new idea and the new method of building those
d the only way in which they can be turned out in time.
r JOHNSON. And it was an untried, wholly experimental
—
ALDWIN. Oh, no.
r JOHNSON (continuing). To be undertaken.
ALDWIN. Oh no: not at all. There is not a thing in that.
r JOHNSON. I am not speaking in the direction of the fabri-
ps, if you have that "slant" on what I am saying.
ALDWIN. No: I do not understand it that way, but it is not
at you say, because each particular part would have been
and worked out.
s a little story of my own foreman of shops will give you
f what I mean. I walked through with him when this thing
ck us, and talked to him. He said, "You can not build
t way."
r JOHNSON. What way did you mean?
ALDWIN. The so-called fabricated, assembling way. He said,
n not build ships that way." I said, "Andrew, your fabri-
ops are over there [indicating]: your ship is over there.
ch the plates, and you bend them over in that corner."
aid Andrew, "that is what I do." "And a traveling crane
em over to the ship and you put them on. You bend the
ck. Now, you do not send those plates back: they come
go on. Suppose that shop was a mile away." He said, "I
e why you could not handle it that way." I said, "Sup
shop was 200 miles away." He said, "By gum, I think you
he only experiment was in having the shop 200 miles away
f 200 yards away. In other words, the thing is exactly of
me experts building it here [indicating] and other experts
t together yonder.
r JOHNSON. It was quite contrary to the ordinary method.
ALDWIN. Yes: it was.
r JOHNSON. And according to new methods, so far as
were concentered in this country?
ALDWIN. Not quite: it had been tried out a little.
r JOHNSON. I am not speaking of whether the fabricated
a success: that is not the purpose of my question. What I
g to bring home to you is that it took an entirely new or-
n and new creation.
ALDWIN. Not a new organization. It took a different or
n from the shipbuilding organization. But you had to
ld welded organization, one working together, or you could
the contractor's job.
r JOHNSON. When you say the plates were built a long way
n mean that the American International have anything to
he construction of the plates?
ALDWIN. We have the inspection of the plates: the Emer
et buys them.

Senator JOHNSON. Does not the Emergency Fleet Corporation do all that is essential in regard to those outside parts?

Mr. BALDWIN. The actual modus operandi there was that we, the American International Shipbuilding Corporation, prepared the detail plans; the New York Shipbuilding Corporation prepared the templates. It worked out a tentative contract with the different fabricators. That contract is then submitted to the Shipping Board for its approval. They then approve it or disapprove it. If they approved it, then we send our templates and send our inspectors to that plant, and we see that the work is there done in accordance with the templates and the contract. Then we have our inspector there to keep accurate measurements, because in a fabricated ship you have got to have the measurements right; the plates have got to come to us right.

Senator JOHNSON. In mobilizing the industries of the country for this great accomplishment, did you mobilize these various institutions that construct the various parts?

Mr. BALDWIN. We mobilized them in this way: By giving to perhaps 25 different fabricating shops the fabricating; by giving, perhaps, to an engine man the engines; to a boiler maker the boilers; to an anchor maker the contract for the anchors; and to another firm of tank builders the contract for hatchway covers.

Senator JOHNSON. Are any of the gentlemen who are interested in those industries interested in the American International or in Stone & Webster?

Mr. BALDWIN. Not at all.

Senator JOHNSON. Or the New York Shipbuilding Corporation?

Mr. BALDWIN. Not the New York Shipbuilding Corporation. In fact, Robinson goes too far in that——

Senator JOHNSON. I beg your pardon?

Mr. BALDWIN. We sent one of our friends down there one day to see Robinson, a man we knew, a man who was interested with us. Robinson said, "He is interested in the American International; we will not have a thing to do with him. I won't buy a thing from him," and he did not. The man came back and said, "Is there really a penalty on a man being connected with you?"

Senator JOHNSON. What did you say?

Mr. BALDWIN. I do not think there is. But we told Robinson—perhaps we are to blame for that, although I do not know that there is much blame about it—"I have lived long enough in this country to know that in tackling this job, no matter who it is, we are going to run up against a senatorial investigation. Don't you do one single thing that you can not spread on the front page of every newspaper in the land, and you be mighty careful about it." And that is what we have really tried to do.

Senator JOHNSON. And those were your instructions to Robinson?

Mr. BALDWIN. They were the instructions all down the line.

Senator JOHNSON. It is too bad that he did not follow your instructions.

Mr. BALDWIN. He has; he has. We have not done a single thing we are ashamed of—nothing we do not want you to know—from one end to the other.

Senator JOHNSON. We are trying to ascertain the simple question of what has transpired.

ALDWIN. That is a difficult thing, Senator. You have here
ıd pages of things; some of them true and some of them
and all sorts of impressions. There is only one way to get
ıg clearly straight, and it is a question of whether you want
e it. I can bring down, as I say, the individual men who
ne all these things and made all these contracts, who are
ble in each case for the individual acts. Those are the
n who can give you direct, first-hand information, because
l the other officers what they have done and the other offi-
rove that. If you do that, then I can take this testimony—
ould be glad to do it, if you would be glad to have it done
y: we will bring down the individual men, and we will go
every item of the testimony. We will either say "Yes:
ight," or we will say "No; that is wrong"—one of the two
ere we say "No: it is wrong," we will endeavor to prove
ı. But that is going to slow down our work very materially.
be afraid if we took a whole lot of men and brought them
ere: I do not know what would happen to the shops. God
I do not know.

or JOHNSON. We do not propose to have anything happen
hops, after the amount of money we have paid. We are
nuch interested as you are in seeing that those ships are con

ALDWIN. If I could say this to you: "Let us go on [illegible]
ips. We are doing the best we can. We do not believe [illegible]
ly in the country more earnest; we do not believe there is
in the country better able to do it than we are. We are
e best we can. Let us get the ships done and [illegible]
hs are over put us in jail if you want to do anything [illegible]
us, as long as we have got the ships that is all we want."

or JOHNSON. I learned long ago that the use of anything
ail had nothing to it.

ALDWIN. Then don't [illegible]

or JOHNSON. I have never had any [illegible]
do have a desire to exploit anything that [illegible]
ary and overwhelming public extravagance.

ALDWIN. We would be completely in your hands. Let
ıd build the ships; you can do anything you [illegible]

or JOHNSON. As far as I am [illegible]
jail. But we will expect the [illegible]
ınd we believe it [illegible]
ınd I want your ships [illegible]
ou have expressed it.

ALDWIN. But you do not [illegible]

or JOHNSON. Absolutely not.

ALDWIN. We do not either.

or JOHNSON. And [illegible]
aordinary amount of money [illegible]

ALDWIN. I went down through the yard [illegible]
I went through the yard—and the [illegible] was frozen
from one end to the other. I was not able to get down the water
nd I saw those men around there, and it really made

cry to see the way those men were working. Ordinarily you would put a steam shovel in there and throw hundreds of yards of dirt, but here was a man picking away the ice and everything around to get foundations down. Perhaps it was taking ten times the labor it ought to take under ordinary conditions to do the work. That has been the real difficulty. A gang that ought to drive, say, 50 piles a day, is only driving 20 or 30 because of the weather conditions there being such that you can not work under them. It is the weather that has done it.

Senator JOHNSON. As I understand it, the work has not been done because of the weather?

Mr. BALDWIN. The work has been done right up to schedule, but it has been done at a large cost because of the weather, because of the fact that we had to do it in the winter. That is what appears like extravagance.

Senator JOHNSON. There is only one cure for that, and that is California.

Mr. BALDWIN. We tried, Senator—I am from the South——

Senator RANSDELL (interposing). What is the matter with New Orleans? We have good facilities down there and good weather.

Senator JOHNSON. I beg your pardon.

Mr. BALDWIN. My people in Savannah said, "Look here, Baldwin, why don't you put the yard in Savannah?" I sure would like to do it if I possibly could, but you could not put the ships together there on a big scale. You can put a 10 or 20 yard way almost anywhere in the country.

Senator JOHNSON. Will you return to the subject matter, if you please? What is your mode for letting the contracts for work in the yard?

Mr. BALDWIN. They are prepared by our officers and submitted to the Fleet Corporation, and if approved by them that is the end of it; if the Fleet Corporation approves them, they are adopted.

Senator JOHNSON. Is it not a part of the duty of the Stone & Webster organization to prepare for those particular contracts?

Mr. BALDWIN. Yes.

Senator JOHNSON. Then those contracts are let to other individuals of outside organizations, are they not?

Mr. BALDWIN. They are let to people who actually do that particular type of work.

Senator JOHNSON. And that has been the course you have pursued of doing the work within the yard, upon the building of the shipyard?

Mr. BALDWIN. Yes. We have let one men who had a pile driver drive the piles for 10 ways; another man who had a pile driver drive for the next 10 ways; and let another man the sewer work.

Senator JOHNSON. Let me see if I recapitulate it correctly, and if I do not, I beg you correct me, of course.

This organization which you have gotten together, which you have described here very aptly and, if you will permit me, eloquently here to-day, lets contracts for the various units of work that are to be done in constructing this shipyard?

Mr. BALDWIN. Possibly not all of them, but most of them.

Senator JOHNSON. Well, substantially all of them.

Mr. BALDWIN. Yes.

Senator JOHNSON. Those are let to contractors who are outside of your particular organization or outside of these three basic corporations that form your organization?

Mr. BALDWIN. Yes.

Senator JOHNSON. The contractor, then, who is a stranger to this organization that has been formed comes into the yard, builds his particular unit and does his particular work, and is paid 5 per cent for that work?

Mr. BALDWIN. Yes.

Senator JOHNSON. That is correct?

Mr. BALDWIN. That is correct, on the ways. I do not know about some of the other contracts, but I think substantially.

Senator JOHNSON. Substantially all of the contracts?

Mr. BALDWIN. Yes.

Senator JOHNSON. When it comes to the building of the ships, you are given your percentage for the fabricating work and the putting of the ships together?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. That is correct?

Mr. BALDWIN. Yes, sir; that is what we are paid for. Possibly, if Senator Ransdell will permit me—I am new in this business of being investigated——

Senator NELSON. I do not think you are.

Mr. BALDWIN. I am, and I do not quite make myself clear all the time.

Senator RANSDELL. We want to give you every opportunity. You go ahead in your own way. We are giving you every opportunity.

Mr. BALDWIN. I appreciate very much the way you have treated me. As I say, on the yard we get no commission and no percentage, and no profit of any kind. When it comes to the ships we are paid, I think, a minimum of $41,000 for the smaller ships and a minimum of $62,500 for the larger ships. We are paid that for building those ships in the yards and getting all the fabricating and all the work done. That is where the $6,000,000 or 3.3 per cent comes from.

Senator RANSDELL. Expressing the 3.3 per cent in another way, then.

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. Let us pursue that now. So far as the yard is concerned private contractors under your supervision——

Mr. BALDWIN (interposing). Construct the yard, under our supervision and under our plans.

Senator JOHNSON. The Government pays for all of it, and the Government pays 5 per cent to those private contractors?

Mr. BALDWIN. Practically, I assume, approximately.

Senator JOHNSON. And the Government pays all of the salaries, of course, of those who are supervising in your organization there and who are directing the work in relation to Hog Island. That has been stated so many times it is useless to state it again.

In addition to that, when you want any expert engineering service, you go to one of the subsidiary corporations, Stone & Webster, and you pay them their fee, plus 100 per cent, on the theory that you have described. That is correct, is it not?

Mr. BALDWIN. That is not quite correct.

Senator JOHNSON. All right.

Mr. BALDWIN. Not when we want any engineering advice, because we have got plenty of that; but when we want engineering advice about some particular thing in which that particular man is most expert.

Senator JOHNSON. We will say when you want particular engineering advice about a particular engineering thing, then you go to one of the employees of Stone & Webster. They furnish his services, and the Government pays 100 per cent upon his salary under the system that you have just stated?

Mr. BALDWIN. Senator, you state it most charmingly, but always you give just a little twist to my idea. [Laughter.]

Senator JOHNSON. If the facts do not give the twist, I do not want to give it.

Mr. BALDWIN. I know you do not.

Senator JOHNSON. Well, but that is substantially accurate, is it not? If it is not, correct me, Mr. Baldwin.

Mr. BALDWIN. Yes; I know you are, Senator. Possibly you may say that that is substantially correct.

Senator JOHNSON. Then, we get on to the ship ways, where you construct, or this organization construct, something less than 50 per cent of the ship, really, because more than 50 per cent is constructed outside, and for that construction of something less than 50 per cent you are to receive the fee that is provided for by the contract. That is correct, is it not?

Mr. BALDWIN. That is the heart of the whole business, the putting of those ships together right and the getting of this flood of material in here from a thousand different shops.

Senator JOHNSON. I do not know whether it is the "heart" of it or not. I am willing to grant it is, but for all that 40 per cent, or less than 50 per cent, of the putting the ship together, you receive your fee.

Mr. BALDWIN. No; we receive our fee for the whole thing, for having worked out the organization, having supplied the organization, having formulated all these plans, having worked out all these contracts, having distributed them all over the country, having selected the people who can do those things best, having had them submit bids, and getting the lowest bid in every case, and submitting that to the Emergency Fleet Corporation, and then seeing that all those things came to the yard that we have planned to receive them; seeing that they come in on time; seeing that they get into the ship right; see that the workmen are trained. I think we are going to do an enormous service to the country in training those workmen to build the ships, which we are now doing. That is the picture of what we do more than simply putting together 50 per cent of the ships. Is not that more truly it?

Senator JOHNSON. Yes; I think you have amplified the picture, in some particulars at least. Now, all of this is done under the salaries that have been mentioned here and with which I assume you are more or less familiar. Are you familiar with the salaries paid?

Mr. BALDWIN. No; I have not gone on through that; that is Mr. Robinson's work.

ıator NELSON. Here is a list of them in part 4 of the hearings; nay keep that book. That shows what they were getting before what they are getting now.

. BALDWIN. I wonder what that total works out.

ıator JOHNSON. I think there is a total in one of the statements have been given: I am not clear just in which volume it is.

. BALDWIN. But the real answer to that is that you could not collected that body of men there without paying them those ies; you could not have collected them in any other way. That real answer to that.

ıator JOHNSON. That is, you could not have collected a body of who would have let the contracts and been overseeing the work out paying them those particular salaries?

. BALDWIN. Oh, take it all down through the list. You can get man or that man or some other man at a lower price, but you it all down through the list and I do not think it would have possible to have gotten together that organization with any less y.

ıator JOHNSON. Have you indulged in any estimate as the total of this shipyard?

. BALDWIN. I think possibly it may run to double what we ght in the beginning it might cost during the summer. If it that is the reason I wanted to bring out my statement that even cost double what we contemplated in our first plans that would mean that your ships were costing perhaps $4 more than the ge price that the Shipping Board was paying for other ships out the yard, and then you would have the yard.

ıator JOHNSON. Do you mean for fabricated ships?

. BALDWIN. For the steel ships that they let their contracts for, ich there is a list in the book here.

ıator JOHNSON. Do you mean for the fabricated ships?

. BALDWIN. All steel ships for which they have made contracts. average price is stated in their table as $166 per ton, and that thout the cost of the yard. The 7,500-ton ships on this basis l cost $170.

ıator RANSDELL. That includes the price of the yard?

. BALDWIN. That would include the cost of the yard in that case, had gone on with the original contract for 200 ships for which ard was planned. The change from 200 ships to 50 ships of the er type and 80 of the larger type would increase that cost per

ıator RANSDELL. How much?

. BALDWIN. Well, I have not figured that out and I have not it in my mind, but you can easily see. The original contract for 1,500,000 tons, and it has been now reduced to 935,000 But you must not forget that when you get through with that have charged up and amortized all that cost of plant you have got the biggest and best shipbuilding plant in the world to go ith as long as you want to go.

ıator NELSON. But your company owns the land yet?

. BALDWIN. We own the land.

ıator NELSON. Well, suppose you get through with your con- ; on what terms will you sell the land to the Government?

Mr. BALDWIN. At cost; exactly what it cost us. That is the contract.

Senator NELSON. But you get 6 per cent interest on the cost in the meantime?

Mr. BALDWIN. As rental for the land; yes. The object of that was this: The Government said they did not have any right—I think the Shipping Board said, "We have not any right to commandeer land or anything of that kind. You go and get it under an option." We did so. Then they said, "You buy that land." And they have made us give them a bond on that land to see that we do not steal any of the Government's money. If you think we steal any money, there is the land.

Senator NELSON. You have given bond that you will agree to convey that land to the Government?

Mr. BALDWIN. We have already put it under bond, to guarantee the Government against our stealing any of the Government's money.

Senator NELSON. There was one statement you made a moment ago that did not strike me exactly right as a comparison of prices. You say it is costing the Government, I think, $166 a ton for most of those ships, but the men who build the ships and get those prices for them invest their own money and their own capital and the Government is not investing it; while in your case the Government is furnishing all the improvements as you go along. So it would hardly be a fair comparison, would it?

Mr. BALDWIN. I hardly think that is quite right.

Senator NELSON. I mean as to all yards.

Mr. BALDWIN. I think in most of the cases the Government has advanced a good deal of money for the yards as well as for the ships.

Senator NELSON. It has in some cases. Of course, those other two companies, the Submarine Boat and the Merchants, are operating on practically the same basis as yourselves?

Mr. BALDWIN. You might perhaps put it another way. The original estimated cost—we submitted a cost; we thought it would probably be about $160 a ton, but that was based on not knowing exactly what the steel prices would be. The controversy was going on then and we could not tell what the price would be. When that was all settled and adjusted and we knew what prices would have to be paid, Admiral Capps and ourselves sat down and figured that out, and the Admiral said: "I don't believe that ship is going to cost you over $142 on an average, and that is my estimate, and I want you to put it in the contract." "Well," we said, "we don't know about that, but if you will undertake to furnish us with the material at these figures you have named, and if wages will remain the same and do not advance, why then, yes, we will agree with you on that; but if the costs of material advance and wages advance, then, of course, something must be added to the estimate." That estimate was $142, and that is perhaps a figure comparable with what you have in your mind.

Senator NELSON. You can readily see what I am getting at. There is a difference between the case where a shipbuilding yard advances its own capital and simply gets a price for the work and the case of a yard where the Government advances all the money for the material and labor and everything.

Mr. BALDWIN. Yes; that is true.

Senator NELSON. And you can hardly compare the two. What I anted to ask—and this is only for my own information—is, Has e Government fixed the price of the material, steel?

Mr. BALDWIN. Yes.

Senator NELSON. When?

Mr. BALDWIN. I say the Government fixed it; I do not know when e Government fixed it, but it is $65 a ton, I understand; and I nderstand the Government did fix it.

Senator NELSON. What was it before?

Mr. BALDWIN. Why, steel was selling just before that, on the arket generally, at something like—Oh, it had got up to $120 a ton.

Senator NELSON. Is that so?

Mr. BALDWIN. Yes; it would average as high as $200 a ton for teel.

Senator NELSON. So the Government has fixed a price of $65 a on, and that is what you are getting it at?

Mr. BALDWIN. Getting it at $65 a ton.

Senator NELSON. Has the Government fixed the price of other aterials, the timber for instance?

Mr. BALDWIN. I do not know that they have fixed the price, but hey are buying it all—yes; the Shipping Board named a definite rice they would pay for the lumber, and they are supplying all the umber. They are supplying all the piles, and some of them are orrors, but they are doing the best they can, of course.

Senator NELSON. Mr. Felton, the president of a great western raiload, says in his report here that a good many of those piles that vere driven there were bad piles, poor piles, and ought not to be sed.

Mr. BALDWIN. They certainly are bad: there is no doubt about hat. But I presume the difficulty there was this——

Senator NELSON. They were very inferior piles, a great many of hem.

Mr. BALDWIN. The general average was very poor, but it does not nake so very much difference, because they go entirely in the foundations. Piles that are driven for wharves have to be better piles, nd we are selecting out the wharf piles. Then, another selection as been made once or twice: they wanted to send a good many piles ibroad, and they have in some cases taken lighter loads from piles ntended for us, dumped them out on the wharfs, sorted them out, nd perhaps out of a couple of hundred piles they would pick out a lozen or fifteen nice, long piles for shipment abroad. That has ended to delay and tended to cut down the quality of those we got. But you can not get such a quantity of piles and get really good elected piles right at the moment: you have got to take some inferior tuff.

Senator NELSON. Let me ask you another thing—and this is simply exposing my own ignorance. Do you use cement piling for the ways?

Mr. BALDWIN. Yes: some of them. One set of ways that is as near the center as we could get them, is being built entirely of cement, and the piling is cement. You would be interested to go up there and see that, Senator: the piling itself is cement.

Senator NELSON. Reinforced with steel?

Mr. BALDWIN. Not the piling; the piling is just simply to weight. But the ways themselves are reinforced with steel. are two objects in that; one was that they could not get wooden piles to handle the job with, and we were afraid w not get them on time.

Senator RANSDELL. Mr. Baldwin, I would like to know if those ordinary wooden piles with cement. Do you put a cov cement over them?

Mr. BALDWIN. No; the concrete piling is all concrete, all down.

Senator RANSDELL. I understand; but when you drive the piles down——

Mr. BALDWIN. We simply cap it with wood.

Senator NELSON. What is the labor condition there now? (get all the labor you need?

Mr. BALDWIN. We can get plenty of labor that is rather in

Senator NELSON. Where does it come from mostly?

Mr. BALDWIN. Why, in the beginning it came in all ove they bring out about 10,000 from the city; there are about 6,000 that live on the place, and the other 5,000 come fro places around there.

Senator NELSON. They have housing facilities now for abou

Mr. BALDWIN. Yes.

Senator NELSON. And you need how much more?

Mr. BALDWIN. They are contemplating there 5,000; but t just poor barracks, and when you come to get your expert me riveters and iron and steel men—they are not willing to live sort of place. They have to have better housing. That is w real trouble is coming.

Senator NELSON. Where would that delay matters—to build houses for them?

Mr. BALDWIN. That depends upon what somebody else is do. It would depend upon that housing problem, which is ve We shall have about the 1st of August next a peak load o men in the yard—about 10,000 of them working as helpers the stuff to the ships and about 19,000 working on the ships workers.

Senator NELSON. In the yard?

Mr. BALDWIN. In the yard.

Senator NELSON. They will do assembling?

Mr. BALDWIN. Yes. When we get this peak load they wil satisfied. The laboring men, the helpers, the 10,000 men, wil the barracks.

Senator NELSON. A good deal of your work is fabricated, s large part of the steel plates are fabricated before they your yard?

Mr. BALDWIN. Everything possible is done in that way, can not carry very big pieces on account of the cars.

Senator NELSON. And the rest of the work you will do the

Mr. BALDWIN. We will do it there; yes.

Senator NELSON. And also assemble the parts of the ship

Mr. BALDWIN. Yes.

Senator NELSON. Now, will you be able to work more t shift there?

Mr. BALDWIN. We will do some night work. We have got a fabating shop there, a large shop, for our shipways. We have ma ine shops and everything, based on a 10-way yard. In other words, have equipment to build in that yard about what you would ild in a 10-way yard.

Senator NELSON. Where you will do this fabricating?

Mr. BALDWIN. Where we will fabricate them and fit parts of the ssel; where we will fit parts that are shipped there that are wrong do other work in an emergency.

Senator NELSON. But of course you could not make boilers and ngines?

Mr. BALDWIN. Oh, no; we could not do that.

Senator NELSON. Simply the frames and the plates?

Mr. BALDWIN. Yes, sir.

Senator RANSDELL. Where does your labor live now, Mr. Baldrin?

Mr. BALDWIN. I think about 10,000 live in Philadelphia, about ,000 at the plant, and about 5,000 scattered around within two or hree miles.

Senator NELSON. What are the transportation facilities for labor rom the suburbs of the city?

Mr. BALDWIN. They are getting a little better now; they were ery bad in the beginning.

Senator NELSON. Could not the Government or the Emergency Fleet Corporation do something to cure that?

Mr. BALDWIN. I think they are helping.

Senator NELSON. Can they not build additional street car lines to ring them down?

Mr. BALDWIN. I think that is being done.

Senator NELSON. That can be done quicker than building houses, an it not?

Mr. BALDWIN. Yes; that will help tremendously.

Senator NELSON. And naturally men who have families prefer to ive in town——

Mr. BALDWIN. They would rather live in town if they can get uick transportation.

Senator NELSON. Rather than live out there in no man's land?

Mr. BALDWIN. If they can get quick transportation.

Senator NELSON. What I am trying to get at is this, that they can help you out and expedite your work fully as much by giving you etter transportation facilities as speedily as possible—that they can give you help in that direction sooner than they can by building houses?

Mr. BALDWIN. Yes; I think they will have to do both. Mr. Holden has just arranged, or arranged a while ago, with the Philadelphia & Reading to double-track a certain line there which has been single tracked up to this time. That is just about done now, and that helps the movement of trains tremendously.

Senator NELSON. Do they try to run trains so as to meet the labor conditions?

Mr. BALDWIN. Yes; the Pennsylvania Railroad is running very nicely now. In the beginning we had some little difficulty.

Senator NELSON. What about street car facilities?

Mr. BALDWIN. That is where the trouble is. They run down to a point somewhere outside the yard. I think the Emergency Fleet Corporation is going to help them. They have agreed to build into the yard a double-track line, and they can handle about 10,000 people if they can get the cars. But, like a good many other people nowadays, they have not any money, so I believe the Emergency Fleet Corporation or some other agency expects to advance them money for 100 cars, which are now under construction.

Senator NELSON. Would not that be as good an investment as the buildings?

Mr. BALDWIN. I think it would; it is better than the buildings, but it does not quite fill the whole bill.

Senator NELSON. No; I can see that.

Mr. BALDWIN. When those cars come—and they will be coming in August 1—that will ease that situation.

Senator NELSON. Is it possible to get the necessary cars for the street-car line, provided the necessary funds are furnished?

Mr. BALDWIN. I think they are already ordered.

Senator NELSON. By the company?

Mr. BALDWIN. By the company, with the promise on somebody's part, that the money would be forthcoming. That is my impression; that is a mere matter of hearsay. I was just told they had arranged that.

There is still another method of transportation, and that is by steamer, which we used until the ice blocked the river. The moment the ice is out of the river we will have two or three steamers to bring people down the river.

Senator NELSON. Let me ask you another thing—I have not been up there, you know. When you have your ship constructed so it is ready for launching, can you get it into deep water in the Delaware River without doing any dredging in front?

Mr. BALDWIN. No dredging in front at all; we are right on the channel. That is the reason we located there. There is dredging to do, but that is in what we call the outfitting basin. That is the lower end, where the piers are. The vessel is launched, and it takes two or three weeks more to fit her out, and we want to launch her just as soon as we can.

Senator NELSON. You want to launch her before you put the boilers and engines in?

Mr. BALDWIN. Well, I think so. Then that vessel is launched and towed right around to the end to our outfitting dock, where there is a heavy crane, and that heavy crane puts in the heavy pieces—the engines and boilers. Then she goes around and is tied up to one of the long series of docks there—long docks—about 1,000 feet long.

Senator NELSON. Have you your shipways under roof?

Mr. BALDWIN. No; they are not under roof.

Senator NELSON. They are out in the open?

Mr. BALDWIN. They are in the open.

Senator NELSON. Would not that interfere with working in bad weather?

Mr. BALDWIN. Not in the summer time; but in the wintertime it will be slow. But you could not put roofs on them. At the New York shipyard we have most of ours under roof there; but most of the ways in the country are open.

ator RANSDELL. How many men will you have employed when re at the maximum of your whole 50 ways?
BALDWIN. From 29,000 to 30,000.
ator RANSDELL. That is what you meant by the "peak"?
BALDWIN. That will be the peak of employment.
ator NELSON. You say you have laid the keels of some ships?
BALDWIN. Laid them this morning and bolted them together.
ator NELSON. How many of them?
BALDWIN. One this morning. We have got 12 ways——
ator NELSON. When can you get the first of those ships in the ready for Government use?
BALDWIN. I can tell you that in a general way; I can not give he exact date. Here is our figure. If you take for expert ship-ers 100 per cent theoretical efficiency, we have assumed that considerable practice in that yard and after turning off two or litters of these ships, we will possibly be able to approach 60 ent efficiency with our men. We do not anticipate getting be-that, because it takes years of training to get much better than We then started off with the idea that on the first ship they l build, their efficiency would only be 40 per cent of that 60 per Then on the second ship it will be 45 per cent of their 60 per going up 5 per cent with each lot of ships until they reach about 60 per cent efficiency.
ator NELSON. Then you are just beginning what I might call shipbuilding?
BALDWIN. Just beginning.
ator NELSON. Of course, heretofore you had practically all the let to subcontractors?
BALDWIN. Yes.
ator NELSON. And they have done the work?
BALDWIN. Yes.
ator NELSON. But are you going to continue doing that?
BALDWIN. They will go on with the yard; the subcontractors go on building the yard, but we will do the ships. The force on hips is directly under us.
ator NELSON. So that the building of the ships is your work?
BALDWIN. The building of the ships is ours.
ator NELSON. The assembling and launching and everything is directly under you?
BALDWIN. Directly under us and directly by us.
ator NELSON. How do you expect to have that work done, by iece or day work or both?
BALDWIN. If we can work out a piece-work system we would r do it that way.
ator NELSON. You would find that more satisfactory?
BALDWIN. That is what we have done at our New York yard. ome of our riveters there pick up $10 or $12 a day sometimes. nk we will do it that way as much as possible. In the beginning all probably find that will tend to inefficiency, so we may begin just day's wages and then gradually pick out our good men n it will pay to put on piece work.
ator NELSON. Are you taking any pains to instruct your men?
BALDWIN. We have a shop there, building a ship, and we are

training young men to come in from various trades. We take a building riveter and train him for a ship riveter. One of the essential features of that yard is that every man coming in there will go right straight to his job; he will not drive 4 different kinds of rivets or 10 different kinds of rivets. He will drive one kind of rivet every time, and so he will get expert.

Senator NELSON. And he ought to learn how to drive that one rivet very quickly.

Mr. BALDWIN. Yes, sir.

Senator NELSON. That riveting is done in gangs of three, is it not?

Mr. BALDWIN. Yes; a heater, a tosser, and riveter.

Senator NELSON. So that if you confine the gang to one particular class of rivets——

Mr. BALDWIN. We can teach them quicker.

Senator NELSON. You can teach the riveter very quickly to do that one piece of work?

Mr. BALDWIN. Yes.

Senator RANSDELL. You did not state just how soon you would have the ships ready for the service of the Government.

Mr. BALDWIN. The contract provides that the first lot of 25 ships shall come off in 13½ months from the contract date. That would bring it to November 1. That is the first lot of 25 ships.

Senator NELSON. Will they be ready at that time?

Mr. BALDWIN. They will be ready for delivery to the Government then. Our schedule shows that probably a third of those boats will come off before the time, about a third of them within a day or two either way, and about a third of them a little later, the average being on that date.

Senator RANSDELL. So you have every reason to think you will have 25 ships on or about the 1st day of November next?

Mr. BALDWIN. Yes, sir; and 52 ships before the first of the year.

Senator RANSDELL. Before the 1st of January?

Mr. BALDWIN. Yes, sir.

Senator NELSON. You mean 52 in all?

Mr. BALDWIN. Fifty-two in all before the end of the year.

Senator RANSDELL. How do you people feel about this fabricated ship? We have had more or less testimony here saying that the fabricated ship was not a practicable proposition at all.

Mr. BALDWIN. My friend Cotton, whose testimony I read with great interest, started off by saying, "I don't know a thing about ships," and he proceeded to prove it, and proved it very thoroughly. I remember his presenting the picture to you, that this ship was something like a great skyscraper laid on its side. But I think he said in the beginning he did not know anything about it. And then he said that the lines were all straight, and that the stern was square, and somebody said, "Just like a scow?" "Yes," he said, "just like a scow." Well, as a matter of fact, when you look at that ship you can not tell it from any other ship. It has exactly the same contours and the same outlines and everything excepting that the deck lines are straight and not curved. That is the only thing you will notice in looking at the ship. The shape of the bulwarks, of course, is not straight. But you do not see all the deck lines. The stern is high, and then it goes down to the deck; then the amidships section is

ie story higher; then it comes down to the deck again, and the bows e higher, so they will take the waves.

Senator NELSON. Do you think they are as steady and seaworthy the old-style ship?

Mr. BALDWIN. We think they are, and we were very much surrised——

Senator NELSON. Is not the bottom a little different?

Mr. BALDWIN. The bottom is flat.

Senator NELSON. Isn't it flat in the other ships?

Mr. BALDWIN. In some few, but not many. They were getting latter and flatter. We were very much surprised when Mr. Ferris ubmitted this design. He designed the boat in the whole, and urned it over to us to design the parts and work them out. He subnitted a perfectly square midship section. Ordinarily, you know, he deck has a camber from the center to the sides, so the water will un off. The old shipbuilders said, "Why, you can not do that at ll; you can not have that flat." They said, "We can not do it; we ever have done it." I said, "Yes, you have. There is a battleship ith a perfectly flat deck. Why did you build that flat?" "Why," hey said, "we had to." I said, "Is there any objection to it?" No, here was no objection; the deck was flat on the battleship. "Then," said, "build this one that way." They said, "All right, we will uild it that way." That was the old shipbuilder speaking; that is is point of view.

When we talked about the shear he said, "Why, they must have hear," but he came to the conclusion he could build them straight. hen, the sides of the boat ordinarily tumble in a little towards the op; I do not know why, unless when a wave hits it it affords less esistance. They said at once that of course that ought not to make o much difference. Then they said we could have a flat bottom, ith just a circular bilge on one side. So that midship section is perfect rectangle, with just a circular bilge.

Senator NELSON. Is a ship constructed in that manner as safe at ea in a storm? Is it not more apt to roll?

Mr. BALDWIN. That is the verdict of our shipbuilders, and that is here some of their value comes in. We took that down to the overnment testing tank here in Washington, where we test all our odels of every kind. Our shipbuilding people scratched their heads nd said, "I don't know what it is going to do." But, curiously nough, that boat at slow speeds—take the 11½-knot boat: at, say, knots, it runs about the same speed and with the same power as a oat of the same size built upon the old-fashioned model, but when t comes up to its full speed, say, 10½ knots, it actually runs better. t runs faster with the same power, or runs at the same speed with ess power.

What we have had to do in that boat is this: We have had to take tructural steel and built it with that. A ship ordinarily takes what hey call "ship shapes," which is not steel like that used in a modern kyscraper. But there were very few rolls in the country that could oll that, because we never built very many ships before. We did not ave enough rolls in the country to roll those shapes, so we said, "We vill have to roll the same shapes that go into tall buildings." Of ourse you can not bend those, so you have to have heavier beams to

get the same strength that you would get with the ship shapes. So this boat will probably weigh 10 per cent more than a boat of the same carrying capacity built in the old-fashioned way.

Here is one more advantage I have not touched on before: When that boat is building our New York shipbuilders are going into that boat; they are going to study that boat; they are going to see everything that is done—check up every error; check up everything that is in it—and when we get through with this ship we will be prepared to say to the Government, "If you want boats that will be built a little slower, we can handle them with a better model than this, a lighter boat." And we will probably be prepared to build for you a ship cheaper than it can be built in England. That is the commercial aspect of this yard if we can put it through that way.

Senator RANSDELL. How do you reason that you can do it cheaper than they would in England? That is very interesting.

Mr. BALDWIN. That is a long tale; perhaps I can put it in a few words. This country is preeminent in supplying the needs of people by quantity manufacturing of all kinds, which they demand and which can be produced in quantity. The first thing we did that amounted to anything in manufacturing was the production of a machine tool, machine tools of various kinds, because our wages were high and we had to have tools to do the work. So we produced machine tools better and cheaper than any other country in the world, and we have been supplying England and France with machine tools that they use over there now to make their shells. We have done that because of our expert mechanics and because of the necessity and because of the quantity of the demand. We did that same thing when it came to agricultural machinery. We have reduced that to a science, until we can turn them out in wholesale quantities and sell them in Russia, in Africa, and everywhere else.

Senator NELSON. And Mr. Ford did it with the automobile.

Mr. BALDWIN. Ford did it with the automobile, because we first worked out the machine tools with which he could do it. We have had the same thing in Waltham watches and Singer sewing machines. That is the one thing in which America is preeminent—the manufacture of tools and utensils of various kinds in large quantities and cheaply.

Senator NELSON. And by standardizing?

Mr. BALDWIN. Standardizing and simplifying.

Senator RANSDELL. And you are going to apply those same general methods to shipbuilding?

Mr. BALDWIN. The same general methods are now being applied in what we call the fabricated ship.

Senator NELSON. You will have the same parts and the same pieces for every 3,500-ton ship?

Mr. BALDWIN. Yes.

Senator RANSDELL. I take it your company has absolute confidence in this fabricated ship?

Mr. BALDWIN. Absolutely.

Senator RANSDELL. You do not pay any attention to what these critics have been saying about the fabricated ship?

Mr. BALDWIN. There is not anything new in it. Senator Ransdell, I go to you and say, "You have been building boilers all your life.

Vill you build me a boiler?" "Yes, I will build you a good boiler." say, "All right." I come to you, Senator Nelson, and say, "Can ou give us a good engine?" "You say, "Yes, I have been building ngines all my life." I go to you, Senator, and say, "Can you furnish e with this?" and you say, "Yes, I have been doing it all my life." 'ou three gentlemen may never have dealt together before, but when bring those three things together I am not experimenting. That is 'hat we are doing in the ship; we are not experimenting at all.

Senator NELSON. You use turbines in these ships?

Mr. BALDWIN. Yes.

Senator RANSDELL. You are simply congregating together the very st material made by the best manufacturers that you can find?

Mr. BALDWIN. The best material and the strongest and ablest men. is men that do these things, after all.

Senator RANSDELL. You think that under this system, after the ar is over and times become normal, we will be able to compete with ngland in shipbuilding?

Mr. BALDWIN. I think we will, sir. That is our hope.

Senator NELSON. I have had that vague impression, and I did not now anything about it.

Mr. BALDWIN. That is the reason why we bought that land. We ld Gen. Goethals that. We told Admiral Capps that, that we ped ultimately to be able to own that yard ourselves and to build erchant ships for the world in it. "Well," he said, "the Govern- ent has the first call." "Yes," we said, "that is true. If the Gov nment wants it it can take it." If the Government does not want , then we appraise the stuff that goes in the yard, everything that e Government has put there, and then we have the second right, if e want it, of buying that material and everything at its appraised alue. If we do not want that material, which is probably incon- eivable, then the Government can remove whatever of its property wants to, and the land remains ours.

Senator NELSON. That would not pay?

Mr. BALDWIN. That would not pay them for a moment; it ought o be a shipyard.

Senator RANSDELL. It is optional with the Government?

Mr. BALDWIN. The Government can go on building ships there for ever if it wants to.

Senator VARDAMAN. You do not think the Government can con- duct a great plant like that, do you, Mr. Baldwin?

Mr. BALDWIN. That is a very moot question, Senator, whether the Government is better capable of handling the thing than a private corporation.

Senator VARDAMAN. Do you think the Government could take over this plant there and conduct it now?

Mr. BALDWIN. If you ask my own honest opinion, I would hate to see them try it. I believe they would find difficulty in handling it as well as a private organization would handle it.

Senator VARDAMAN. And you think if this committee is to obtain all the information that is necessary to lead it to an accurate con- clusion as to the cost of conducting this plant, constructing it, etc., the only way they can get it is, as you suggest, by bringing these sub- contractors in, the men who did the work? You do not think it

would be altogether fair for the Congress to take the reports of Mr. Piez, Mr. Hurley, Admiral Rousseau, and Mr. Felton, who is an expert in railroad management? Do you think that is not altogether the fair and proper way to ascertain the truth?

Mr. BALDWIN. I think you want to make up your mind that a lot of what they have said is true. They have tried to give you all the picture possible, but it is not quite all the picture.

Senator VARDAMAN. Do you think a man like Mr. Piez, who has had great experience in conducting large enterprises of this character, and Mr. Hurley and Mr. Felton, who is a great railroad man, would be as capable of finding out the facts as almost anybody?

Mr. BALDWIN. I think those men are men of ability and men of sane, sound judgment and first-class men; but when it comes to an opinion on a construction job our people have been doing it all their lives. Mr. Piez has not, nor has Mr. Hurley. They may have had contact with it, but they have not been doing it.

Senator VARDAMAN. So the only way we can get the facts is to overlook those men? They will do us no good? They can not help us? We must go on and investigate the details through the men who have done the work?

Mr. BALDWIN. No; I will not say that. I say, give due weight to whatever you have heard.

Senator VARDAMAN. Do you not think the plan you have outlined is practically impossible for the Congress to follow?

Mr. BALDWIN. That is the only way I could answer definitely all of your detailed questions which you might like to ask.

Senator VARDAMAN. Are there not men, engineers and builders, who have given their lives to it, who could go and make an investigation and inform the Congress really more accurately than we could get it ourselves from these men that you have mentioned?

Mr. BALDWIN. Senator, you bring an idea. If you could pick out four or five or more, any number, of men who had themselves undertaken large contract jobs and who knew all the difficulties, and would say to them, "Now, go down to that yard and sit there for two weeks"—and don't let them get away before two weeks, because it will take them that long to find out anything—"and then come back and tell us whether there has been any real extravagance in that yard or not," that would be the expert testimony on which I think you could rely.

Senator VARDAMAN. But we could not rely on the statements that have been submitted to us?

Mr. BALDWIN. I think while those gentlemen have endeavored to present the matter fairly and fully, they have not been able to do so.

Senator VARDAMAN. Well, it causes me to despair of being able to get the facts. It seems to me President Wilson has made a great mistake in naming his Shipping Board, and the Shipping Board has been peculiarly unfortunate, particularly unfortunate, in the selection of the subordinate officers to perform the functions of this great trust.

Mr. BALDWIN. No, Senator; the Shipping Board is an illustration of what I have tried to show here, that you can not throw together a new organization and put it to such a tremendous task and have it move smoothly.

Senator VARDAMAN. Then in your judgment, if the Government an not do that by men selected because of their demonstrated ability n this line of work, it is evidently a great mistake for the Government to take over the railroads or undertake to perform any function f that character? You have just got to trust to God and the interest f private individuals to work this thing out?

Mr. BALDWIN. I think, Senator, that the Government, in matters f that kind, had best exercise a governmental function of supervision nd regulation rather than actual operation.

Senator VARDAMAN. You know from your own experience you can not supervise effectively without knowing the details of the thing you are supervising?

Mr. BALDWIN. That is true; you must know what you are doing.

Senator VARDAMAN. Of course; you have got to do that; and that is what the President has done, what the Congress has done—it has selected these men because of their peculiar fitness, because of their technical knowledge and peculiar qualifications. Now, if we can not trust them the whole thing seems to me hopeless.

Mr. BALDWIN. I think you can trust them, Senator. What did they do? Mr. Piez says, "I am not a shipbuilder." Mr. Hurley says, "I am not a shipbuilder." What I am going to do is to get what I think are the best people in the country——

Senator VARDAMAN. Are you a shipbuilder?

Mr. BALDWIN. I am not a shipbuilder, but I have got people under me who are expert shipbuilders.

Senator VARDAMAN. And so have they got you under them.

Mr. BALDWIN. That is just what I am coming to.

Senator VARDAMAN. How many men on your board of directors re shipbuilders?

Mr. BALDWIN. The American International?

Senator VARDAMAN. Yes.

Mr. BALDWIN. None at all.

Senator VARDAMAN. And they do not know any more about the etails of shipbuilding——

Mr. BALDWIN. None at all about the details of shipbuilding.

Senator VARDAMAN (continuing). Than the Democratic emblem nows about the nebular hypothesis. I do not care to ask anything urther.

Senator JOHNSON. What one individual is most familiar with the etails of the work of construction at Hog Island?

Mr. BALDWIN. Mr. Muhlfeld is the man in charge of the construction of the yard.

Senator JOHNSON. He has a more intimate knowledge than anybody else?

Mr. BALDWIN. Yes. Mr. Goodenough has charge of the construction of the ships.

Senator VARDAMAN. There may be something in a name in that nstance.

Mr. BALDWIN. I hope there is.

Senator JOHNSON. The American International is a permanent corporation?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. It is designed to engage in trade, ocean trade, foreign trade, and the like?

Mr. BALDWIN. Designed to engage in foreign trade; and then we found that the shipping situation was such that we had to have the vessels in going to the Orient; and then we found we had to have a shipyard to build them in.

Senator JOHNSON. It is a permanent institution for the purpose of shipbuilding, shipping, foreign trade, carrying, and the like?

Mr. BALDWIN. Yes, sir.

Senator JOHNSON. Have you discussed the permanency of this particular yard in your directorate?

Mr. BALDWIN. The one at Hog Island?

Senator JOHNSON. Yes, sir.

Mr. BALDWIN. We hope to make it a definitely permanent yard.

Senator JOHNSON. Yes. Now, if the Government does not continue it or does not exercise its option, the yard necessarily remains yours, does it not?

Mr. BALDWIN. Yes.

Senator JOHNSON. When you speak of the Government removing the buildings and the like, there is a very small part of it that it would be possible to remove?

Mr. BALDWIN. Very little of value.

Senator JOHNSON. So, if we expend $42,000,000 upon this shipyard and the Government does not see fit to exercise its option, it goes with the land and with this permanent institution?

Mr. BALDWIN. No; it does not go with the land. It is not worth anything much for permanent purposes. It should be amortized into the cost of the ships that the Government does build in the yard.

Senator JOHNSON. Yes, sir. That is all.

Senator VARDAMAN. Let me ask you another question, Mr. Baldwin. Who made the estimates as to the cost of this plant?

Mr. BALDWIN. They were made by—I do not know the engineers in the Emergency Fleet Corporation, but our engineers and the Emergency Fleet Corporation figured it out last summer. Of course, we did not know what we were going to do.

Senator VARDAMAN. Do you know now?

Mr. BALDWIN. Yes; we know now.

Senator VARDAMAN. Can you tell how much it is going to cost?

Mr. BALDWIN. We could tell you how much it is going to cost if everything remains on a definite basis, but you can not tell what is going to happen in the future.

Senator VARDAMAN. What are the things that are doubtful?

Mr. BALDWIN. Suppose you can not get your labor, and the whole work slows down. There are a good many contingencies that come in to make an estimate more or less valueless.

Senator VARDAMAN. So, really, the estimates that have been made were valueless?

Mr. BALDWIN. I do not think they have been of very great value; no, sir.

Senator VARDAMAN. The judgment of these great experts that Messrs. Stone & Webster and others are going to furnish is not always infallible?

Mr. BALDWIN. They can only be based on specific circumstances. You can take specific wages and specific prices of material and you can say what it is going to cost to do a certain piece of work.

Senator VARDAMAN. You are a gentleman of large business experience. Did you not know that these contingencies might occur, that the cost of steel would go up, and the cost of labor would go up, and these delays would occur? Did you tell anybody that it might cost $22,000,000?

Mr. BALDWIN. We told the Shipping Board at first that if they do not do the work in summer time it might cost them anything. We could not tell what it would cost. We could not foresee the war conditions. We thought at one time that $100 a ton for a vessel was an enormous price. Vessels were offered to us for $100 a ton, and we said, "No; it is too much." A month later the price was $125.

Senator VARDAMAN. That is some of the patriotism that has been added to these things. Advantage has been taken of war conditions.

Mr. BALDWIN. Yes.

Senator VARDAMAN. It does not cost any more to make a ton of steel now, or very little more, except for the labor, than it did heretofore.

Mr. BALDWIN. Well, really all prices have gone up together.

Senator VARDAMAN. Certainly; they have gone up.

Senator NELSON. There is just one other question I wanted to ask, and that has reference to this option contract. If the Government does not feel inclined to buy you out, to buy the land from you, are you compelled to buy the plant from the Government at the appraised value?

Mr. BALDWIN. We are not compelled to do it.

Senator NELSON. It is optional?

Mr. BALDWIN. It is optional.

Senator NELSON. You can take it or not take it?

Mr. BALDWIN. Yes.

Senator NELSON. So it is possible that the Government might have the yard left on its hands?

Mr. BALDWIN. I think the Government must face the possibility of amortizing the whole cost of the yard into the vessels.

Senator NELSON. So the Government faces the proposition that in order to save its investment in the yard there—because it would not pay to tear it down and remove it—it must buy you out?

Mr. BALDWIN. No.

Senator NELSON. Why?

Mr. BALDWIN. As long as the Government wants to use it they have the right to keep it and use it at the 6 per cent rental.

Senator NELSON. Indefinitely?

Mr. BALDWIN. Indefinitely.

Senator RANSDELL. By paying the 6 per cent?

Mr. BALDWIN. By paying the 6 per cent on its cost.

Senator VARDAMAN. Six per cent on how much. About $2,000,000?

Senator JOHNSON. $1,706,000.

Senator JONES. Your statement, Mr. Baldwin, has been very interesting to me. I only want to ask you one or two questions. You made one suggestion a while ago that did not sound very good to me, and that was about Mr. Bowles's suggestion, that you slow up on account of lack of steel. I wish you would explain that. Is it possible we are not going to have steel enough to build the ships that you are able to build?

Mr. BALDWIN. I will show you a little diagram to illustrate I mean. [Drawing a diagram.] We figure that if that line re sents time, that is the time we will have our ways ready. We our first construction on those ways within a few days after the finished, and as the construction goes on to the last ship there wi a greater distance between the time of completion of the ways the time of completion of the steel. Now, Mr. Bowles says to that up and let those two lines run parallel. We say no; we have a margin in there to provide for accidents, so that if we ha fire or anything else happens to us it will not interfere.

Senator JONES. In other words, you are allowing for tingencies?

Mr. BALDWIN. We must have "cushions" there.

Senator JONES. You are allowing for contingencies?

Mr. BALDWIN. Just in the same way that we have eight hool a vessel. That has been criticized. "Yes," we say, "two hook plenty if you want the boat to go slow, but if you want your to go fast you must have more, and if you can save one minut the use of that hook it is worth the money"—because these ve are worth $9,000,000 a month and more.

Senator JONES. Is it suggested the steel will not be availab fast as you will need it?

Mr. BALDWIN. The steel will be available at the times whe need it, but it will not be quite ready when the ways are ready. steel will be all right; we have nothing to fear as far as I can s that connection.

Senator JONES. What is it he wants you to slow up on?

Mr. BALDWIN. He wants us to slow up on the construction o ways, because he says we will have them ready before the steel c

Senator JONES. But you ought to have them ready before steel comes?

Mr. BALDWIN. That is what I am answering Mr. Bowles. I "You must not cut out our cushions in there because of a economy."

Senator NELSON. Is he there in charge now?

Mr. BALDWIN. In charge of the three fabricating plants. that is a very wise move, because he will help to expedite thin the conditions slow us down too much.

Senator NELSON. He is in charge of all three yards?

Mr. BALDWIN. The Submarine Boat and the Bristol yard.

Senator JONES. As I understand it, you think the plan re mended by Mr. Piez here will slow up the construction of the sh

Mr. BALDWIN. We so told him; yes.

Senator JONES. You think, from your experience and your kn edge of the situation, that that will be the result?

Mr. BALDWIN. I will not quite say that. We have agreed Mr. Piez. We think it may slow it up a little, but it will not b serious that we really object strongly to it. What should be is to concentrate now on 32 of the ways, putting in all the piles come in, and leave the others to be looked after in the future.

Senator JONES. If you follow that plan are you sure it will slow up the construction of the ships that are to be delivered year?

Mr. BALDWIN. It may, but I am not clear that it will; it only may. I would rather have gone on with our original plan of doing the whole 50 as best we could, but we assented to that, because we did not think it would materially slow it up. As soon as one man gets through with his pile-driving equipment on one set of piles we will put him on the other ways.

Senator JONES. You would really be more confident if you followed your own original plans?

Mr. BALDWIN. I really would be more confident.

Senator RANSDELL. Mr. Baldwin, we are very much obliged to you, sir. If it is agreeable, we will adjourn now until Thursday at 2 o'clock.

(Thereupon, at 5.30 o'clock p. m., the committee adjourned to meet at 2 o'clock p. m., Thursday, February 14, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

THURSDAY, FEBRUARY 14, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., n the committee room, Capitol, Senator Joseph E. Ransdell presiding.

Present: Senators Ransdell (acting chairman), Vardaman, Simmons, Nelson, Smith, Jones, and Johnson.

Senator RANSDELL. Mr. Franklin, the committee is ready to hear ou now.

Will you please give your name, residence, and occupation, and tate the interest that you have in this matter in your own way.

TATEMENT OF MR. J. A. FRANKLIN, INTERNATIONAL PRESIDENT INTERNATIONAL BROTHERHOOD OF BOILERMAKERS, IRON-SHIP BUILDERS, AND HELPERS OF AMERICA.

Mr. FRANKLIN. My name is J. A. Franklin. I am the international president of the International Brotherhood of Boilermakers, ron-Ship Builders and Helpers of America. My residence is Kansas City, Kans.

Mr. Chairman and gentlemen, my interest in the question of shipuilding and the production of ships, of course, is a very large one, ecause of the large number of our membership who are engaged in hat industry. This membership covers the entire North American Continent. I do not mean to say by that that all men engaged in he industry are members of the organization, but a very large perentage of them are. That percentage now is largely increased by he new men who have recently been introduced into the business.

Our particular reason for asking for a hearing before this comittee is because of the many statements, or charges, that have been ade, both to your committee and to the general public, through the aily press, charging the workers engaged in the shipbuilding inustry, particularly the men engaged in what is known as hull conruction, with retarding the output, or laying down on the work, hereby restricting the output of ships.

Those statements have taken such a wide scope and have covered many different angles of the question that it is rather difficult to nswer all of them. There are so many reasons for the apparent alling off in production that I think this committee should underand the facts.

When the program of shipbuilding was started by the United States Government, through what is known as the United States Shipping Board and the Emergency Fleet Corporation, and they commandeered all of the shipyards and ships that were under construction, and the attempt was made to enlarge the forces of men employed without taking the proper method of securing the men who were skilled at their several trades and the attempt was made to bring into the industry men who had never had any previous experience or knowledge, not only of shipbuilding but of any other mechanical work, it was only natural that there should be a decrease in output per man employed.

The fact that inexperienced men were brought into the various yards throughout the country, and the experienced men were diluted by these inexperienced men, was bound to bring about a decrease in output.

Senator SMITH. Well, that does not mean that there was a conflict between them, does it?

Mr. FRANKLIN. None whatever: not a conflict.

Senator SMITH. But just lack of experience, or skillful efficiency?

Mr. FRANKLIN. Yes, sir—that enables a man to produce 100 per cent of efficiency.

Senator RANSDELL. Would that not apply to any kind of new business that was started up, where men without previous experience or skill in the business were going into it in large numbers?

Mr. FRANKLIN. Absolutely. It is impossible to avoid it. Take an unskilled man in any industry, particularly in the mechanical trades: take a man off of the farm, or out of any other industry, who is not a skilled mechanic able to do the kind of work he is required to do in a shipyard, and it is impossible for him to produce the results that a skilled man would naturally produce.

Senator JONES. And if he works along with the skilled man, it is likely to interfere with the efficiency of the latter, is he not?

Mr. FRANKLIN. Yes, sir: he just naturally reduces the efficiency of the skilled man. That is because the men work in gangs of three or four. What is known as the machine gang consists of three men, a riveter, a holder-on, and a heater: a hand gang—and I mean by that the men that drive the rivets by hand with the old-style hammer consists of four men, two riveters, a holder-on, and a heater.

Now, you take one unskilled man and put him with a skilled man and he naturally reduces the efficiency of the gang, because he is not able to do the same amount of work that two skilled men would do if working in the gang together. I do not think it is necessary to enlarge on that, because I believe you gentlemen thoroughly understand that principle, that a man who is not familiar with the work required of him can not be expected to produce the output that a workman would who has had sufficient experience to enable him to understand and to be skilled in the use of tools.

These men have been brought in in the past few months in such numbers that it has been the direct cause of whatever falling off in the production or the amount of work turned out by each gang there has been.

That does not exist to the extent that some people who have appeared before the committee, and others who have written articles in the press, would try to make you believe. We have made some

investigation since these reports have been circulated, and since certain witnesses have appeared before your committee, and from the Pacific coast, from the yards from which the chief complaint has been made, our people tell me that the foremen in those yards have admitted that there is not the falling off that has been charged, and that there is no such reduction in output.

One of the chief causes for what might appear to be a lack of efficiency, or falling off in output, is due to several other reasons: The failure to get material; the failure of what are known as the shop men, the men who get the material out, to have it prepared and ready for the men who are constructing it on the hull. And unless there is teamwork all around, if there is any failure or falling down on any part of that machine, there can not be the output that there ought to be under normal conditions, the output which would and did obtain under normal conditions, because they did not have all of these difficulties to contend with at that time.

Now, we do not attempt to claim for one moment that there is no possible instance or individual cases where men may not have done all that they might have done. There are various reasons that may be attributed as a cause for that. But, as a general thing, the workmen, I believe, are doing the very best they can under the circumstances to give the best possible output with the facilities and opportunities they have to perform the work.

Another thing is that there have been two or three shifts started in many yards. Men working on night shifts can not possibly produce the same amount of work that a man can on a day shift, because of lack of light and their lessened ability to get around on the scaffolding. For many years the men employed in the hull department in the shipyards refused to work on a night shift because of the extra hazard. And we have had many cases in San Francisco where men have been killed and others maimed for life, because of insufficient lighting and faulty scaffolding, which can not be determined as well in the night time; and there are so many unfavorable conditions that entered into working on the night shifts that the men have in the past refused to work on night shifts because of the hazards involved.

We prevailed upon them, however, when this emergency arose, to withdraw their refusal and to work two or three shifts, or as many shifts as might be required.

And there are no cases now that I know of where men are refusing to work any shift or work all the time required. The question of overtime is also involved, where there are only two shifts working or where the yard is not equipped to work more than one shift; in those cases the men are working overtime right along, and with continuous overtime hours a man naturally becomes worn out, and he is not able to produce, and I do not think he should be expected to produce, as much per hour as if he worked a straight 8 or 10 hours.

The charge has been made before this committee and in the press that the men were only averaging a very small average—particularly the riveters.

In the Moore & Scott yard, I am informed—and authentically, I think—from Oakland and from San Francisco, that this charge is unfounded; that it has no basis of fact. But they have told me that

there are a number of things that prevent the men in that yard from producing at present what we might term a normal output of prewar times, before the great rush of men into the yard. Among those causes are inefficient tools, worn-out tools, lack of material, and many things that enter into the output and cause a restriction of it that can not possibly be charged to the workmen.

There is another thing that I think is largely responsible in many places for a falling off, or a decrease, in the efficiency of the yard. There have been in hundreds of cases men placed in supervisory positions over the men, who have never had any experience; who are without any shipyard experience; that is to say, not only that they are not mechanics, but they have never had any previous experience or connection with a yard whatever.

Senator SMITH. Do you mean representatives of the Government?

Mr. FRANKLIN. Well, in some cases, representatives of the Government; men selected as examiners or inspectors; men who are not taken from the ranks of men who are skilled and who understand the business.

In one instance, to give you an idea of the inefficient foremen in one of the southern yards, an automobile driver who had never done anything in his life in a shipyard, except for about two weeks before he was appointed a foreman, was put over one of the very important classes of workmen, the chippers and calkers, who did the chipping and calking and the testing of tanks, and all that class of work, where it is very important that a man have a thorough technical knowledge of the work, in the first place, in order to perform the work, and, in the second place, he should be a man who is competent to act and to inspect as foreman.

Senator JONES. Do you know of many instances of that kind?

Mr. FRANKLIN. Not of that particular character.

Senator JONES. Well, I mean of the same general nature?

Mr. FRANKLIN. I know of many cases where inexperienced men have been made foremen; men who have never had a week's experience in a shipyard prior to their being appointed to a subforemanship.

Senator RANSDELL. Was that due to scarcity of experienced shipbuilding men in the country, or to what cause would you say it was due—putting those inexperienced men in positions of responsibility?

Mr. FRANKLIN. No; I could not say that the men were placed in the position of foremen due to the lack of efficient men, because there are thousands of efficient men from whom foremen can be made. It might be necessary to bring less skilled men into the trade as workmen; but I can not understand why a man should be placed in a supervisory position who has not a technical knowledge of what he is supposed to supervise. His inefficiency will naturally increase the inefficiency of the workmen.

Senator RANSDELL. Were there enough skilled men in shipbuilding from whom these foremen could have been selected?

Mr. FRANKLIN. Yes, sir; because there are thousands of them working yet, as mechanics and as workmen. It was not due to the lack of sufficient skilled men to make foremen out of. Now, I am not talking about a man who might be a superintendent of a yard, who would act as the general director, but I mean the foreman who is in charge of the work, directing the gangs of men.

ɪr JONES. That is, instead of taking this automobile driver, .nce, and making him a foreman, they ought to have made ɪrt of the working force?
RANKLIN. Absolutely.
ɪr JONES (continuing). And taken some of the skilled work- employed them as foremen?
RANKLIN. Yes, sir. But that man I spoke of was put on the they attempted to school him with two weeks' experience; ɪd of two weeks he was made foreman.
ɪr NELSON. You stated a moment ago that if there was any up in the work, it was owing largely to the fact that they ɪn in a lot of new and inexperienced men. Did you not say

RANKLIN. Yes, sir.
ɪr NELSON. Is it not a rule among you union men that those ɪ get the same wages as the others, if they are on the same work?
RANKLIN. If they are on the same class of work; yes, sir.
ɪr NELSON. If there are inexperienced men, or green hands, the work, you union men insist that they must pay those .ds the same as the older ones get; is not that a part of your

RANKLIN. That is true. If it was not true, the working con- ɪnder which the men are supposed to work would be prac- lestroyed. Eventually the standards, not only of wages, but ncy and everything else, would be destroyed.
ɪr NELSON. Would that not be measuring both wages and ɪ by the lowest standard——
RANKLIN. No.
ɪr NELSON (continuing). Instead of the higher standard?
RANKLIN. Well, it would if men came in at a lesser rate; be measuring the efficiency by the lower standard.
ɪr NELSON. No. If you insist, when new and inexperienced ne into the trade in large numbers, that they should have e pay for the same class of work as the experienced men, ting your statement that those new men are inefficient because new men, is that not making the same standard for the effi- d the inefficient as to wages?
RANKLIN. Yes; that is true.
ɪr SMITH. I thought there was an apprenticeship in those

RANKLIN. There is in trades; and it is an apprenticeship uires a man to serve four years.
ɪr NELSON. That is, in the boiler-makers' trade?
RANKLIN. In the boiler makers and in branches of the ship

ɪr NELSON. Is there not a limitation in the number of ap- s?
RANKLIN. Yes; the usual regulation is one to five; that is, in ɪdustry where——
ɪr NELSON (interposing). You mean, that is the regulation nion?

Mr. FRANKLIN. No; that is the agreement between the employer and the employees.

Senator NELSON. Well, I thought the union had a rule of that kind.

Mr. FRANKLIN. They have a rule of that kind that is intended to cover that.

Senator NELSON. Did you say one apprentice to every four men?

Mr. FRANKLIN. No; one to five. In normal times that takes care of the trade and produces a sufficient number of mechanics, who will be educated and schooled; and the rule of one to five will also take care of those who leave the industry.

Senator NELSON. Let me ask you this question in connection with that—I am asking for information: In the present emergency, when we need so many men, would it not be wiser to take on a larger proportion of apprentices?

Mr. FRANKLIN. They have already provided for that.

Senator NELSON. You have?

Mr. FRANKLIN. Yes, sir.

Senator NELSON. To what extent? I mean at what rate?

Mr. FRANKLIN. Well, you may understand that in the hull department and in the shipbuilding the workman is made from the man who works, say, as a holder on or a heater; those men are advanced; and there is not the same regulation on the apprenticeship system as there is, say, in the machine shop or the boiler shop or any of the other shops. Now, those men are made as they are required. A man may be advanced from being a helper to a chipper and a calker; a man who has had years of experience as a helper goes up in that way; and they are schooled and educated in that way by years of experience in the shipyards and by working with a mechanic. They are really apprentices; but there is no restriction as to the numbers in the hull department.

Senator SMITH. Well, how do they stand with the employees: are they on the same basis as the others?

Mr. FRANKLIN. Absolutely.

Senator SMITH. And do they get the same pay?

Mr. FRANKLIN. They get the same pay. When these men are advanced either to a riveter or a chipper and a calker or a fitter—usually among the fitters they have apprentices, because that is the highest skilled part; the fitter is the man who lays out the work, does the molding, and does all of that higher grade of work.

Senator NELSON. Let me see if I understand that situation. The riveting is done in gangs of three, is it?

Mr. FRANKLIN. Three or four, according to the method; a machine gang is composed of three men and a hand gang of four.

Senator NELSON. Do each one of those gangs get the same pay?

Mr. FRANKLIN. No. Do you mean each one of the men constituting the gang?

Senator NELSON. Yes.

Mr. FRANKLIN. No; it is divided up 44, 34, and 22 per cent. For instance, say, it is $18 a gang for a day's work.

Senator NELSON. For the gang?

Mr. FRANKLIN. Yes, sir; that is divided up 44, 34, 22——

Senator JONES. Per cent?

Mr. FRANKLIN. Yes, per cent.

Senator NELSON. One man gets 44 per cent, another 34 per cent, nd the other 22 per cent?

Mr. FRANKLIN. Yes, sir; the heater gets 22 per cent; the holder on ets 34 per cent, and the riveter gets 44 per cent.

Senator NELSON. That is the arrangement among themselves, how-er, is it?

Mr. FRANKLIN. Well, that is the arrangement they have with the nployer; that is the arrangement they have as to the division of e money.

Senator NELSON. Is that piecework or is that in the daywork?

Mr. FRANKLIN. That is piecework; or it is what they call "allow-ce" work. What I mean by "allowance" work is where the men n not make anything out of it at piecework; for instance, take attered work. In riveting work it is known as "pick-up" work; here all the holes have bolts in them and where the condemned vets are not knocked out; then there is a gang that goes along and cks up all of this odd work, and they are paid on what is known as llowance." That is based on a piecework rate, because the men ve to move their tools from place to place and move the scaffolding metimes, and of course they can not turn out the amount of work at regular riveters can. Consequently, their time is consumed in oving about; they are working all the time, but by reason of hav-g to shift from place to place on different parts of the boat, they n not work on piecework prices, and that work is paid for on an lowance, and they will get $18 or may be it is $16.50, or whatever e rate may be; that rate is divided up 44, 34, and 22 per cent among e three men.

Senator NELSON. And the average for each of the three men is $6 lay?

Mr. FRANKLIN. Well, that would be true if the gang got $18. I st used that as a matter of illustration.

Senator NELSON. I see; that is not a fixed rate?

Mr. FRANKLIN. No. That may be the rate in some places, on cer-in classes of work. You understand that the piecework rates are sed on the size of the rivets and the part of the boat where they e driven; there are some places where it is very difficult to drive vets and they naturally get a higher rate there, there are other laces where it is what we call straight work, where the men can turn it a much larger number of rivets, and the prices are naturally wer there; it is all based upon the part of the boat and the sizes of e rivets, and all that sort of thing.

Senator NELSON. Yes, I can readily see that there ought to be some istinction there.

Can you tell us, in a general way, what proportion of this kind of ork is piecework and what proportion is daywork?

Mr. FRANKLIN. Well, that varies very much in different yards.

Senator NELSON. Probably there is a good deal of both in each ard?

Mr. FRANKLIN. There is in all yards in the country, with the ex-eption of possibly one or two yards—well, I will have to retract hat statement—in New York there is no piecework with the excep-ion of one yard. In the majority of yards in New York it is all laywork; that has been a custom of long standing in that section.

In Philadelphia it is piecework in the hull department almost exclusively. In other yards there are 30, or 40, or 50, or 60 per cent of piecework; it depends largely upon the equipment and the facilities for turning out the work. Some of the yards are not equipped to have the work done so that men can go right ahead with the work and work on a piecework basis; in other words, where men work piecework the strict supervision of the yard is almost lost sight of, and the pieceworker must look after practically everything in connection with his work. He must see that the stage is right; he must see that the holes are perfectly reamed; they have what are known as reamers, who go ahead of the riveters and ream the holes. The pieceworker must see that the reaming gang has got his work prepared for him, and there is not the supervision over the pieceworker that there is over the day worker, and that, in my opinion, is detrimental to the yard and to the workmen. If there was proper supervision by somebody in authority to see that all of this work was done at the proper time, and that it was prepared for the men, it would increase the efficiency of the yard to a very great extent.

Senator NELSON. Let me ask you this question in that connection: If this was done, as you suggest, to increase the efficiency, would it not result in the workingmen getting better wages? Would they not earn more on the piecework?

Mr. FRANKLIN. If they did not have these obstructions.

Senator NELSON. I mean, if everything was prepared for them, as you have suggested, would they not earn more then by piecework than they could by daywork?

Mr. FRANKLIN. Certainly, if everything was prepared and they had nothing to do but go ahead and do their work, whether it was riveting or chipping and calking, or whatever it might be, they could do better. But if the plates do not come on time from the plating department; if the bolting crews have not the plates bolted up in time; or if any one of those various operations falls down, it naturally delays every one that follows it.

Senator NELSON. Yes: I can see that.

Senator RANSDELL. What is the general attitude of the unions toward piecework?

Mr. FRANKLIN. The men in the shipyards are very favorable to it; in the hull-construction department, as a general thing, the men are in favor of it. As a general proposition, the piecework is not viewed with favor by men in the general classes of work coming out of the trades.

Senator RANSDELL. You are distinguishing them from the men in the shipyards? Is that what you are speaking about now?

Mr. FRANKLIN. That is in the hull department. The men, such as riveters, chippers and calkers, reamers, billers, and tappers, very generally work by piecework, and there has been no difficulty with them: they have done that from choice. Well, in some places, they have objected to it because of what they have termed an unfair schedule, and the thing that has operated the most to create a feeling against piecework has been the habit of many employers, after a piecework price was set, if the men, or a certain percentage of the men, were able to produce work sufficient to make what the employer might consider a higher rate of pay, the piecework prices were then cut, and

hat gradually went on until a feeling grew up among the men gainst the system of piecework prices.

Senator NELSON. Well, ought not that piecework to be based, not pon what the highest or the lowest man can do, but upon what the verage man can do?

Mr. FRANKLIN. It should be; but they have not always done that. In that connection, the day that Mr. Gompers testified before this ommittee I received a telegram from Buffalo, N. Y., where the Buffalo Dry Dock Co. cut some of their piecework prices about 50 er cent—and there had not been a change in those prices for some ime.

Senator RANSDELL. Reduced them about 50 per cent, you say?

Mr. FRANKLIN. Decreased them.

Senator RANSDELL. I say, they decreased them about 50 per cent?

Mr. FRANKLIN. Yes, sir; about 50 per cent. Now, that simply tarted a state of warfare in that yard. The men naturally protested; they would not stand for it. And we had to take it up with ie Shipping Board. And that sort of thing not only creates a great al of dissatisfaction, but it restricts the output; it is things like at that produce confusion in the yard.

Senator RANSDELL. What company was that?

Mr. FRANKLIN. The Buffalo Dry Dock Co.; that is what is known the American Shipbuilding Co.

Senator NELSON. Is that company building ships for the Government?

Mr. FRANKLIN. Oh, yes; it is on Government work. We had that justed, but there were about three or four days when the men were a state of unrest; and they are not going to produce the same iount of work when that condition obtains.

Senator RANSDELL. Has that been done in other yards since this ipbuilding program started?

Mr. FRANKLIN. Not generally, no; that is the most aggravated se that has come up. There has been some increase in piecework, it there have been many yards—for instance, in the San Francisco strict, up until very recently—I should say about three weeks ago—ere has not been a change in piecework prices for 13 years, notithstanding the fact that the day rate has changed several times. he piecework prices remained stationary. Recently they have been creased somewhat.

Another thing that causes men to complain about piecework prices this: One of the yards in San Francisco, so far as we know, has ever permitted any one to get their piecework prices. I personally ave repeatedly asked the officials of the company for a copy of their iecework schedule, and they not only refused to give it out, even their employees, or to permit me to have a copy of it, but they efused to give it to any other employer of San Francisco.

Senator NELSON. Do they not inform the men that work by the iecework prices of the rates?

Mr. FRANKLIN. No; there is no published price. You can go on a ob and perhaps you will work 8 or 10 hours on that job, and then he foreman will come around and say, "I will give you such a price n that"; if the workman agrees with him he goes on working. Perhaps the workman will come around to-morrow and say to the

foreman, "I can not make wages on that job." Then there will be another wrangle about it; and there is lost time, lost motion, in wrangling over those prices.

There is no fixed, established rate, as far as we can learn. I tried to get it from the men; I have gone to groups of the men in all the different departments of that yard, trying to get in that way the schedule of prices paid there; but I never was able to get it.

Senator NELSON. Have you any objection to stating what yard that is?

Mr. FRANKLIN. Absolutely none. It is the Union Iron Works of San Francisco.

Senator NELSON. Union Iron Works of San Francisco?

Senator JONES. They have that condition there now, have they?

Mr. FRANKLIN. Yes. There is no published piecework schedule, as far as I have been able to find out, that has ever been given out by the Union Iron Works of San Francisco.

Senator JONES. And they still work on piecework, do they?

Mr. FRANKLIN. They still work on piecework, in the manner I have told you. Now, a workman can tell you that "the price of driving rivets on a certain part of the boat is so much, as I worked on that yesterday." And they give it to the men in that way; but to give you a regular, established piecework price, they do not do that. At least, I have never been able to get it.

Senator JONES. So that a man does not know what he is going to get for his work?

Mr. FRANKLIN. On many of the jobs they do not. And that is one of the causes of complaint.

Senator JONES. I should think so myself.

Mr. FRANKLIN. Another complaint that the men have made to me—particularly among the riveters, and some of the men on the other jobs—is that the employers in some of the yards say to the men: "Go ahead and begin work, and I will see you later and fix up the price." And then the foreman will come around later and say: "Well, you will work daywork on that job"; after a man has put in six or eight hours on that job, he will be told that that job will be daywork. Now, that is true in a number of yards where there is no piecework schedule published. The majority of the yards, I will say, have published piecework schedules, and the workmen know just what the operation is worth and what the prices are.

Senator NELSON. Mr. Franklin, you have given us a pretty good account of the modus operandi, in reference to hull construction. Now, your union that you represent is also composed of boiler makers, is it not?

Mr. FRANKLIN. Yes, sir.

Senator NELSON. Will you please explain a little as to the modus operandi of the boiler makers, as you have explained it to us with regard to the hull construction? I would like that for my own information.

Mr. FRANKLIN. Well, the boiler makers work, almost universally in the shipyards, and in most other industries, on a straight hourly basis.

Senator NELSON. Do they work in gangs?

Mr. FRANKLIN. Yes; but not to such an extent, of course, that they do in other classes of work, such as riveting.

Senator NELSON. Would you class those men who are working on boiler making as experts, instead of as common laborers? This may seem a foolish question to you, but I do not know much about it.

Mr. FRANKLIN. Well, the boiler makers, as a general rule, are required to serve four years' time before they can qualify as mechanics.

Senator NELSON. Before they can qualify as mechanics in that trade?

Mr. FRANKLIN. Yes; it requires that time; and then they have only begun to learn the trade; a man has never yet really learned the trade in that time, so far as I have discovered.

Senator NELSON. But they must have helpers with them?

Mr. FRANKLIN. Yes, sir; helpers and apprentices.

Senator NELSON. Is there any rule as to the proportion of helpers and apprentices in that trade?

Mr. FRANKLIN. Yes, sir.

Senator NELSON. What is the proportion?

Mr. FRANKLIN. The rule is one apprentice to five mechanics.

Senator NELSON. And what about helpers; what is the rule as to them?

Mr. FRANKLIN. That is governed largely by the class of work the mechanic is doing; he may have one helper or he may have three or four; it depends entirely on the class of work he is doing. Many of the heavy operations that he is required to perform require a number of helpers on account of the necessity of handling the heavy material.

Senator NELSON. There seems to be a great demand for boiler makers also in this emergency?

Mr. FRANKLIN. Yes, sir.

Senator NELSON. And why would it not be well to increase the number of apprentices in order to get skilled help in that way? Has anything been done in that direction?

Mr. FRAKLIN. We have been able to supply all the boiler makers needed, and we have cooperated with the Government in furnishing boiler makers for the shipyards. You understand that a boiler maker performs practically the same class of work as the work in a shipyard—that is, the work is done with the same class of tools and in the same manner—although it is on a different structure that he is working on.

Senator NELSON. Yes.

Mr. FRANKLIN. They do the same class of work, so far as the mechanical operation is concerned.

Senator NELSON. That is, the same as the riveting?

Mr. FRANKLIN. The riveting, the calking, and chipping, and anything of that kind. The only thing that would be required of a boiler maker going into a shipyard is, possibly, a week or 10 days to acquaint himself with the methods used in the hull construction, and then he becomes just as efficient a man as though he had been in that work before, because of his skill and knowledge of the trade.

Senator NELSON. And those boilers are made in other shops than the real shipbuilding shops, are they not?

Mr. FRANKLIN. Well, some of them; a large percentage of the shipyards are not equipped to manufacture a sufficient number of boilers to supply the ships that they turn out; consequently, they subcontract to what is known as purely boiler shops—shops that do not do anything but turn out boilers, and that class of work—tanks, etc.

Senator NELSON. Does your union have anything to do with manufacturing the machinery for the ships?

Mr. FRANKLIN. No; that is done by the machinists.

Senator NELSON. That is a separate union, is it?

Mr. FRANKLIN. That is a separate organization.

Senator NELSON. You must excuse me for asking these questions, but I want to find out about the actual conditions of work.

Mr. FRANKLIN. I am very glad to tell you anything I can about it.

I want to give you a brief outline of what we have attempted to do to assist the Government—and when I say "we" I mean as an organization—in securing a sufficient number of skilled workmen to take care of the needs of the shipyards.

We have not only circularized the organization and all of the local unions, calling their attention to the necessity of workmen going into the shipyards from the nonessential industries where men are employed that are not engaged in Government work, but we have recruited large numbers of men, both for the shipbuilding for the Emergency Fleet Corporation and for the navy yards.

Senator NELSON. Now, let me ask you this question: Have you found that a great many of the men were anxious to get in there to escape the draft?

Mr. FRANKLIN. We found individual cases of that.

Senator NELSON. Yes.

Mr. FRANKLIN. And along that line, I think that a serious mistake has been made by our Government——

Senator NELSON (interposing). Well, I refer to men that are inexperienced in the trade coming in to join and get into that work.

Mr. FRANKLIN. I am talking about skilled men.

Senator NELSON. I am not talking about skilled men; I was referring to the others.

Mr. FRANKLIN. Well, with your permission, I would like just to call your attention to what I believe to be a serious mistake of our Government in drafting the skilled mechanics for whom they have had such a crying need, according to the reports, to pursue the work of skilled men; they have taken them into the Navy and into the Army, and then they attempted to recruit from inexperienced men to go into these skilled trades to perform the work of men that are required to serve for five or six years in order to become efficient workers.

And we have decreased the efficiency, not only of our railroads but of our shipyards and our munition factories, by drafting those men who are skilled men, trained at their trades, and placing them in the Army and the Navy, and now we are going out and dragging the byways and the hedges for the unskilled men, and then we are condemning the workmen because there is not a 100 per cent output.

Senator NELSON. Well, this was what I referred to particularly. Do you not find a great many of those unskilled men swarming in to be taken into the shipyard work in order to escape the draft?

Mr. FRANKLIN. I think that is true, to some extent, in the shipyards. Now, there have been practically none of those unskilled workers that have gone into the railroads or other shops. But there has been an open gate for them in the shipyards, and they have flocked in there.

Senator NELSON. Yes.

Mr. FRANKLIN. And they have taken on those unskilled men, without those in authority pursuing a proper method to secure a sufficient number of skilled men. We demonstrated a short time ago, in Kansas City, that skilled men could be secured. We had two practical men sent there from Seattle to act as examiners to gather skilled men for shipyard work in Seattle through the United States Labor Department.

Those men were sent to my office with instructions to ask my cooperation. We got together, in about 10 days, between 385 and 400 men and shipped them to Seattle, and all those men were skilled in their trades. We shipped machinists; we shipped molders; we shipped blacksmiths, sheet-metal workers, and boiler makers; and we could have shipped a large number of others. And there are, in every industrial center, those men who can be gotten together and placed in the shipyards, and we can raise the efficiency of the shipyards to a very high percentage by pursuing that method.

Now, those men can not be obtained through employment agencies, and I want to explain to you gentlemen why you can not procure them in that way: The skilled workman is not going to an employment agency; he does not have to do so to-day, because there are jobs for him everywhere he turns, and he is not going into an employment agency looking for them. He is not going to respond to an advertisement in the newspapers.

But if you go to his meetings or if you meet him in the street or in the shop in which he is employed and you explain to him the urgent necessity of a sufficient number of these men being transferred into the navy yards and the shipyards, where their services are required I can tell you that you can get them, but you can not get them in any other way. You have got to carry the message right to the man, either in the shop where he is working or in his meeting room, and get hold of him in that way, and we have demonstrated that it can be done in that way.

Senator SMITH. Will they go to the shipyards as a matter of patriotic duty?

Mr. FRANKLIN. Yes; we are doing it. We will do it if the Government, through the Shipping Board and the Labor Department, provides for the transportation of these men, we can get the men, and I think the Labor Department will tell you that.

Senator RANSDELL. Mr. Franklin, what is the practical way of working that plan? Take the case you spoke of; they sent an agent to your office, did they?

Mr. FRANKLIN. Yes, sir.

Senator RANSDELL. That was in Kansas City, was it?

Mr. FRANKLIN. Yes, sir; that was through the Labor Department.

Senator RANSDELL. And you helped those men that they sent there; you directed them, did you?

Mr. FRANKLIN. Yes, sir; I think they will tell you that I really secured the men for them.

Senator RANSDELL. Let us try to get at this in a practical way, because this seems to me to be something which is very important. Will you tell the committee something about the details of that plan, if you please?

Mr. FRANKLIN. The Labor Department has started the work of getting the men in this way, through what are known as "examiners."

They turn them out into the various industrial centers. Th
started that system, and I think the only reason they have
gressed further is owing to the lack of funds and their in
carry it out.

And if a sufficient number of those men are placed in th
cover the territory, to go into the various industrial cent
there are mechanics employed, in all the different trade
smiths, holders, machinists, and all of the metal trades th
quired in the shipyards—if they will go to those men an
to them personally, they can get them.

Now, I found that that was the only way we could
We went to the men in Kansas City, in the industries
purely nonessential, and we took a certain percentage of
out of those industries; not enough to cripple those ind
shut them down; but we took a certain percentage of t
out by going to the men and explaining the emergency of
ernment and the necessity for those men going into the s
and, as I say, in two weeks we gathered about 400 of t
together and shipped them out at that one point.

Now, we had large numbers of applications. Those ap
came about through a letter that I sent to our local unio
them to get in touch with me or with those two men who w
for the Government in Kansas City; and we would ar
them to get together, and we would arrange to send th
the shipyards. Now, when those men were called out of K
they had a large number of applications on file, and all t
have been required was for them to go to those places an
men together.

Senator JONES. Did those men that you sent to Seattle, f
receive higher wages when they got to Seattle than the
getting before?

Mr. FRANKLIN. Yes; in some instances they did.

Senator JONES. Well, what was the general practice as t
other words, was that one of the inducements held out
leave the jobs they had?

Mr. FRANKLIN. There was an inducement of better
out to them, together with their desire to go into the
industry. Many of them went for the shipbuilding exp
road men who were skilled mechanics in their trade
boilermakers, blacksmiths, but they had never had t
perience in the shipyards, and some of them wanted tha
and they wanted to help out. These men said: "We
our jobs, even if it is a sacrifice." And we have had m
the war started; and the Navy Department requested
the men, and they will tell you that we have furnis
every man they got, through the different organizati
of those men left to work at a lesser rate.

Senator JONES. Did you find, as a general rule, t
offer higher wages in order to get the men to leave th

Mr. FRANKLIN. No; not as a general thing. We
wages were, but there were many conditions in th
more favorable than they

Senator RANSDELL. Did you have to furnish them transportation?

Mr. FRANKLIN. They furnished them transportation; yes, sir.

Senator RANSDELL. Was transportation furnished them from Kansas City to Seattle and return to their homes, or was it furnished just one way?

Mr. FRANKLIN. Well, the return transportation was not considered.

Senator RANSDELL. It was furnished just one way?

Mr. FRANKLIN. Yes; they paid their fare one way. That is natural—to expect that the Government would have to pay that—because the workman does not usually have $50 or $60 handy for that purpose.

Senator JONES. Of course, he ought not to have to pay it himself.

Senator RANSDELL. No; he should not be required to do that.

Mr. FRANKLIN. He should not be required to pay his own way. But they left a service that in many ways is preferable, from a workman's standpoint, in the railroad shops and the various contract machine shops to what they would find in the shipyards, because of the character of the work that they would have to perform in the shipyard.

Senator JONES. I presume, as a rule, you got single men?

Mr. FRANKLIN. No; we shipped married men; the men paid the fare of their wives in many cases and took their wives with them.

Senator JONES. That is, the men did that?

Mr. FRANKLIN. The men did that themselves. Of course, they had their own fare paid, but they provided transportation for their wives.

Senator RANSDELL. Before sending on those men did you investigate each one of them to find out whether he was all right?

Mr. FRANKLIN. Not personally.

Senator RANSDELL. But you had it done, did you?

Mr. FRANKLIN. Those two men sent there by the Labor Department, who were practical ship men, examined into that to see whether from their experience and number of years of work and so on they were qualified; they made a personal investigation of each man, and a number of the men who applied were turned down.

Senator JONES. Those two men represented particularly the shipyards, or did they represent the Government?

Mr. FRANKLIN. They represented the Government.

Senator RANSDELL. They represented the Department of Labor, did they not?

Mr. FRANKLIN. They were employed by the United States Labor Department and worked directly under the Central Labor Agency of Seattle. Mr. Silcox was in charge of it. And they reported direct to the Labor Department in Washington.

Senator RANSDELL. Has that been done in many other cases of which you know?

Mr. FRANKLIN. Only locally; around the Seattle district; they attempted to confine their efforts to securing skilled men to that immediate vicinity, and that is a failure. They can only get unskilled men there, because there is no industries from which to draw, except when you go to Victoria. There are Victoria, Tacoma, and Vancouver, and they are needing men just as badly as Seattle is, and when they go to Portland they find the same thing, and outsid-

those cities there are really no industrial centers in which there are a number of those men employed to draw from. Consequently, they have to come farther inland to get those classes of men.

Senator NELSON. And you could not take them from Victoria and Vancouver anyhow, in view of the labor and immigration laws?

Mr. FRANKLIN. No; we can not take them from Victoria and Vancouver. Consequently, they have got to come farther inland in order to get those men. The field from which those men can be drawn is what we call the Middle West and the Middle East—Pennsylvania, Ohio, Indiana, Illinois, Iowa, Missouri—and as far west as Colorado you can gather up those men in groups in all of those States.

Senator RANSDELL. Is there a very large field from which to draw skilled labor of the classes of which you speak for the shipyards, say, within 300 miles of the Atlantic coast?

Mr. FRANKLIN. Yes, sir; and there are thousands of men, Mr. Chairman, employed in industries who, if the message were taken to those men direct, could be obtained. Now they get a superficial idea of what is going on, but they do not know the facts; and we are perfectly willing to put men on the road in an effort to get those men. We have men on the road now; we are perfectly willing to use those men in connection with the men sent out by the Government to assist in getting those workmen into the shipyards. And if it develops later on that skilled men can not be provided, then it is time to bring in the unskilled men and try to drag them in.

We have had all kinds of schools started; and the claim is made that you can make a mechanic in from four to six weeks. That is so ridiculous that it hardly needs any denial. It can not be done. And the man who puts forth the claim that you can make a skilled worker and as efficient a worker as the man who has served years at the business by standing a few plates of iron up and driving a few rivets in it and then having him knock the rivets out again—that is so ridiculous that a practical man would never stop to consider it.

Senator RANSDELL. If I understand you correctly, however, there are a number of kinds of industries within a radius of 300 miles of the Atlantic seaboard where men have for years been engaged in work so similar to the shipbuilding industry that in a brief time—two or three weeks at the outside—they could do reasonably skilled work in shipbuilding?

Mr. FRANKLIN. Without any question, Mr. Chairman; and that, it can be demonstrated, is the only logical, practical solution of the question of getting mechanics for the shipyards and of doing away with this inefficiency that we hear so much about.

Senator RANSDELL. Can we obtain those men without interfering seriously with the various other industries?

Mr. FRANKLIN. Yes; it will take some men away from them, of course.

Senator RANSDELL. But not enough to cripple the industry?

Mr. FRANKLIN. Not enough to cripple them; it can be done.

Senator NELSON. Now, there is a great diminution in the building trades; in those trades you can get some skilled men, can you not?

Mr. FRANKLIN. Yes.

Senator NELSON. You can get some from those trades, and they will be glad to get work, because they are, to some extent, idle?

Mr. FRANKLIN. That is true. We went to this extent: We would take sheet-metal workers, for instance, who can be used as ship fitters. Sheet-metal workers are men who are familiar with blue prints and with what we term "laying-out" work and drafting; they can be used in the ship-fitting department, which is a work similar to theirs. And we are taking those and using them in the shipyards as ship fitters. We are not drawing a line along craft lines and saying that a man can not go in and do the work——

Senator NELSON (interposing). Well, take, for instance, men engaged in structural-iron work, on buildings.

Mr. FRANKLIN. They are being utilized. We shipped some of those out of Kansas City.

Senator NELSON. And also bridge builders?

Mr. FRANKLIN. Well, structural-iron workers and bridge builders are the same class of workers.

Senator NELSON. And they can easily be broken in to shipbuilding?

Mr. FRANKLIN. In certain classes of work, yes; because they are accustomed to driving rivets from years of experience; they can be used on that class of work.

Senator NELSON. I suppose the greatest scarcity of workers, when you come down to it, is in the wooden shipbuilding trades, to get what you call experienced ship carpenters.

Mr. FRANKLIN. Well, for many years we have not built any wooden ships, and the old shipwright has become almost extinct, and it is claimed—I am not competent to pass judgment on that, however, except in a general way—that it requires some little time for the ordinary carpenter to become familiar with the ship joiner's work, or the old-style shipbuilding.

It seems to me, however, that this question has taken such a wide scope and there has been such condemnation of the workmen, with an attempt to fasten on them the responsibility of whatever falling off in output there may have been and to make the workmen responsible for that, and in many cases charging the labor unions with being responsible to the extent of certain labor restrictions or union restrictions—and that charge is so unfounded—that it seems to me there ought to be a thorough and complete investigation of the facts, and then let the responsibility rest where it properly belongs. If it belongs on the workman, we say let it go to the workman. If it can be shown that the responsibility for the falling off or the failure to produce the proper output, all things considered, including the conditions under which the workman works, should be on the workman, then let him bear the responsibility. But if it belongs somewhere else, let us determine that fact and let it rest where it belongs.

Senator NELSON. In that connection I want to ask you this question for information: Do you insist—and by "you" I mean the union people—that in the shipyards they shall only employ union men?

Mr. FRANKLIN. No, sir; we do not.

Senator NELSON. You do not do that in any case?

Mr. FRANKLIN. We take care of that after the man is employed; if we can prevail upon him to join our organization——

Senator NELSON (interposing). But you do not ask or demand as a condition of employment of the shipbuilder that he shall not employ outsiders?

Mr. FRANKLIN. No, sir; I have an agreement here——

Senator NELSON (interposing). I do not dispute your word at all. I only ask for information.

Mr. FRANKLIN. What I was referring to is that we signed an agreement with all of the yards in Portland, and in the case of some of those people with whom we signed an agreement we did not have a union man in the shop. That may seem strange, but we did it to take care of the future.

Senator NELSON. Yes.

Mr. FRANKLIN. There was an embargo on the products of one of those shops that had been on for a year; we had in certain places certain work tied up because of this firm being unfair.

Senator NELSON. Yes; you had a sympathetic strike there?

Mr. FRANKLIN. No: it was not a sympathetic strike; it was a strike against this firm, and then we refused to use the products from that shop.

Senator NELSON. That is what I mean.

Mr. FRANKLIN. But we lifted that; we said, "This is no time to quarrel over these matters."

Senator NELSON. That occurred at San Francisco, did it not? I read something in the newspapers about that.

Mr. FRANKLIN. That was there. And I was in San Francisco at the time and was responsible for having that embargo on those boilers that came from the Willamette Boiler Works, at Portland, removed and starting our people to working on those boilers.

Senator NELSON. You did good work there: that was good work.

Mr. FRANKLIN. Well, we have tried to show that we appreciate the position our country is in, and that we are not going to do anything that is going to hamper or interfere with the success of this war in which we are engaged. Our future independence, our future welfare, depends upon the success of it; and we appreciate that fact just as much as any other citizens do.

And while we are going to do everything in our power to protect the interests of the men we represent, we are not going to let them interfere with the successful operations of the shops and yards that are essential to get out the product which the country so greatly needs.

Senator JONES. Mr. Franklin, may I ask you——

Mr. FRANKLIN (interposing). Permit me to continue for just a moment. That is one reason that we have provided for the wage boards, and for the mediation boards, to settle all of those things and to prevent any stoppage of work.

Senator NELSON. Yes: by all means, I think, Mr. Franklin, that in this emergency you ought to do all you can to prevent strikes which suspend work. If there is any controversy, it ought to be settled by arbitration.

Mr. FRANKLIN. But we do resent people coming in and charging us with all of the crimes in the decalogue and saying that we are responsible for all this; and we know that we have no medium through which we can successfully refute those charges; we can not

get our statements printed in the press; the press will not carry them. If I went down to the newspapers here to-morrow and gave out a written denial of those charges, I would possibly find a 2-inch article set off somewhere in the corner of the newspaper next day. But all of those charges against the union will appear in the daily press with headlines, so to speak. That is sensational stuff, charging the union men with something; charging them with laying down on the job, and being responsible for all of the failures. And I want to say to you, gentlemen, that the failure rests somewhere else; it rests in mismanagement; it rests with the people who are responsible for having the machinery in those yards not going so that the workmen can properly perform their work.

Now, there are individual cases, I know, where men are doing what they can to retard the work; but those are individuals——

Senator JONES (interposing). I want to say just this along that line: I approve very strongly of the stand you take, and I sympathize with your resentment at the way in which you are treated; but I want to ask you whether you saw the article in the Sunset Magazine about a month or so ago?

Mr. FRANKLIN. I did. That was in October, was it not?

Senator JONES. I do not remember the date.

Senator NELSON. It was later than that, I think.

Senator JONES. I do not remember the date. At any rate, the writer of that article pointed out some of those particular instances which you probably have in mind. I intended to bring that article with me to the committee to-day so as to ask you about one or two of the particular things that the writer of it mentioned, but in the rush of business I forgot to bring it. But you probably remember it.

Mr. FRANKLIN. That was the article, was it not, that referred to the boiler maker and shipbuilder as a very rough character, and a man that was not required to have very much brain matter?

Senator JONES. Well, I do not remember that. But what I had in mind was only particular instance that the writer of the article gave of a particular workman who was harrassed by the unions after he had done so and so, and that he was finally compelled to get out. And I wondered whether you recalled that particular article.

Senator JOHNSON. There was another one, too, which has been thrown in my face repeatedly, 30 or 40 times since these hearings began.

Senator JONES. That is what I wanted to get at.

Senator JOHNSON. And in that article the pictures of ships were given which it was said were lying idle in San Francisco Harbor because the workmen would not touch them, and all that sort of thing.

Senator JONES. That was in the same article that I was speaking of.

Senator JOHNSON. Do you remember that article, Mr. Franklin?

Mr. FRANKLIN. I do.

Senator JOHNSON. I should be delighted if you would give some explanation of that matter, because that has been tossed at me forty times or more since these hearings began.

Mr. FRANKLIN. I will be glad to give what explanation I have, and of course that might be to some extent limited. This boat, the

picture of which has been published, was one belonging to a ferryboat company, or a company running the boat between San Francisco and Vallejo.

Senator NELSON. Where?

Mr. FRANKLIN. Between San Francisco and Vallejo, Cal.—a passenger boat that ran between those places. They had some difficulty with their employees, and it became of quite a serious nature; and the San Francisco Labor Council, I believe, placed an embargo on that, refusing to let any of their employees—or, rather, declaring that no member connected with the San Francisco Labor Council would work on any repair work for that company until such time as they treated their employees fairly. The difficulty started over a man who was employed on the boat itself.

About that time, after every means had been exhausted to come to an agreement with the company, that action was taken by the Central Labor Union, and there was one of the boats that had a part of the boat cut out, and the workmen stopped work on it.

This happened some time prior to the rush of shipbuilding. I think it was in November or the latter part of October—probably about the 1st of November—I would not be sure as to the date.

This matter was settled up and the men made the repairs on the boat. Now, just what the settlement was, whether they said, "Well, we will forget all about the difficulty with the company, and we will repair this boat anyhow," or not, I am not competent to say; I do not know just how that was done. But I know that the men went on and finished the boat and completed the work.

But it was because of the unfair attitude of the owner of that boat, who, as reported to me, refused to talk to the men or to consider the grievances of the men or to have any business with them at all, that that was done. The owner simply said, "I am running this boat, and, if you do not like what is going on, let her alone."

Senator RANSDELL. Did you say that was a ferryboat?

Mr. FRANKLIN. That was a ferryboat; a little passenger boat that ran between——

Senator RANSDELL (interposing). It was not an ocean-going boat?

Mr. FRANKLIN. No, sir; not an ocean-going boat; it was a little boat that was plying between San Francisco and Vallejo, Cal., or the Mare Island Navy Yard, and ran up and down the bay. I do not know the name of the company; perhaps Senator Johnson knows.

Senator JOHNSON. No; I do not recall it. I have not read the article myself, but I have been asked about it many times, because the article purported to show that here was a ship for the United States Government that could not get upon the ocean because the men would not work upon it, and pictures of the ship were given, and so on. Is that not your understanding of the article, Senator Jones?

Senator JONES. Yes.

Mr. FRANKLIN. That was an error, because it was not a Government boat; the Government had nothing to do with the boat. It was a private concern that ran a little ferryboat, about 20 miles up and down the bay, between San Francisco and Vallejo, Cal.; and the Government had no supervision over the boat, as far as I know. Now, if there was any, I have no knowledge of it. But that was the

boat that they made so much noise about, because the men refused to work.

Senator JONES. You do not remember the particular instance cited in this article of the workman who was mistreated? If you should be here to-morrow I will try to find that article and have it here. There was one statement in it that seemed to be almost unbelievable, and yet it purported to state what was a fact. I would like to have a statement from some one who knows the laboring men's side with reference to it.

Mr. FRANKLIN. It is just possible that it might have happened in this way: There are at times men who have violated their obligations to the union and have done overt acts which have embittered the men of their trade against them to such a point that they have refused to work with them. I can not say just what this particular instance was, but that sometimes occurs.

Senator JONES. Of course I can appreciate that.

Senator JOHNSON. I think it would be a wise idea, if you could, to look at that Sunset Magazine article, and when you have familiarized yourself with the facts send a statement in relation to them to the committee.

Mr. FRANKLIN. Yes; I think it would. I suppose I can get that magazine at a news stand.

Senator JONES. I have it over at my office.

Senator NELSON. I think that same man gave me a copy.

Senator JOHNSON. I think it has been pretty generally circulated here.

Senator JONES. I have not the original article; it is just a reprint in one of the papers in Seattle, taken from the Sunset Magazine, which shows how extensively they are using it.

Senator JOHNSON. I have never read the article, but quite a number of Senators have spoken to me concerning it and asked me about it.

Mr. FRANKLIN. If I have not any personal knowledge of the case I can get the facts.

Senator JONES. I think it would be well from your standpoint to answer some of those statements.

Mr. FRANKLIN. I shall be glad to do so.

Senator SMITH. What is your jurisdiction, Mr. Franklin? You are president——

Mr. FRANKLIN. Of the International; our jurisdiction covers North America.

Senator SMITH. And in the present crisis do you know of any shipbuilding establishment that is, strictly speaking, a closed shop?

Mr. FRANKLIN. I do not. When we people talk about a "closed shop" that is a technical term applied from one side.

Senator SMITH. I use that term in my question as contradistinguished from the open shop, as affecting union labor.

Mr. FRANKLIN. Shipyards, as far as the unions are concerned, are practically all of them open shops, but there are closed shops from the employers' standpoint, where union men are not permitted to work. That is the only closed shop that I know of. Of course we take care of the situation by endeavoring to prevail upon men to join us.

Senator NELSON. After they have gone to work?

Mr. FRANKLIN. After they have gone to work. It is said that in Seattle we have a closed shop. We have not—not as the term is applied. All of the men in the yard are not union men possibly, because men go in there and become members after they go in. When you consider that they have taken from 10,000 to 11,000 men into one local union in the past year it would indicate that they were not all union men to start with; they were not all union men when they went to work and they are not all union men now. And even though it is considered a closed shop, from the employers' point of view of a closed shop, it is not.

There was a request from the men on the Pacific coast for a closed-shop agreement; in other words, that men in their respective unions only would be employed to perform this work. That was not written into the agreement, we did not insist upon it, and it is not a provision of any of our agreements or understandings with any employer. We simply provide for conditions, hours, wages, and all of those things, and there is no provision that none but union men will be employed. That much-talked of "closed shop" is a misnomer as far as it is applied to the unions.

Senator NELSON. Take this case at Seattle. If a man goes in there to work, after he has been there for a while and you people can not get him to join the union will you make it so unpleasant for him that he will feel like quitting?

Mr. FRANKLIN. No. Where a yard or shop is organized—say, 90 per cent—the men come in voluntarily.

Senator NELSON. I mean the men do not discriminate against non-union men in their conduct toward them?

Mr. FRANKLIN. They have not done so. We realize—we have said to the Government; we have said to the Shipping Board: "We will get these men for you. If we can not get union men, we will get nonunion men. We will go into the unorganized shops and get men." We could not do any more. We have been willing not only to spend our time but to cooperate with these men to get them.

Senator NELSON. And you tried to get them, whether they were union men or not?

Mr. FRANKLIN. We have. I provided for the shipment of men from Kansas City to Philadelphia to work in the navy yard there who were not members of the union.

Senator NELSON. Let me ask you, Mr. Franklin, if you know in what yards that are to work for the Government there is a scarcity of labor. Can you tell us in a general way?

Mr. FRANKLIN. Where there is a scarcity in Government yards at the present time?

Senator NELSON. Yes.

Mr. FRANKLIN. Well, I think possibly all of the yards could use additional men, but there is not that scarcity that many of these people would lead us to believe. We see much in the newspapers about the demand for 250,000 shipyard workers. I would like for some of them to just specify where they are going to put those men. The industry is, it is true, opening up gradually, and as these yards are extended the force will have to be gradually increased. But to advertise for 250,000 men—if they had them there would be no place

to put them. There are no houses for them to live in. There are no facilities to take care of them. There are no shops for them to work in.

Senator NELSON. I want to tell you something. This morning I received a telegram from the publicity agent of the Minnesota Safety Commission wanting me to write an article to use as an advertisement to get men for the shipyards. Well, I had never felt in any connection like being a wooden Indian in front of a cigar store, and I do not want to be the means of getting men to travel off to get work when I am not sure of giving them the work. I felt that if any advertising was to be done it should be done through the Fleet Corporation and not through me.

Mr. FRANKLIN. Yes. In my opinion, answering your suggestion, the only practical way to get these men is to do it through a bureau that is thoroughly organized and in touch with every point where they need men, and they must know the exact number of men that are actually needed—not just this reported need of men, not a lot of inflated figures, but they must know just exactly the number of men that are needed in each yard. Then have these yards, through this bureau, which at the present time is being handled by the Department of Labor, get these men. They should receive instructions each day or each week, as often as necessary, to send so many men to Philadelphia, to such a yard, to send so many men to Bath, Me., or to Savannah, Ga.; they should know the actual number of men needed, and handle the matter in a businesslike, efficient manner. This haphazard method of getting men is never going to produce results, and it only brings about a state of chaos.

I would just like to give you an illustration. When the Navy Department first began to ask for men the Civil Service Commission took up with me—this is all documentary information that can be furnished—the question of furnishing so many men. They wanted me to get them and send the names to them. I sent out to our membership and got the names and addresses of several hundred men, and I sent them to the Civil Service Commission, and I said, "These men are now ready to leave their employment and go to work for the Government, and you can get them any day." Those men have never been called into the service yet, and the names and addresses of those men I sent to the Civil Service Commission. I was condemned from one end of this country to the other by our own members as playing a bunko game on them, because they were never called into the Government service. That is an example of the things that are going on.

Senator SMITH. Has there not recently been issued an Executive order that these men are to be employed regardless of the Civil Service? I believe that order has been issued within a day or two.

Mr. FRANKLIN. They were not required to pass any civil-service examination. They were required to fill out a long application blank and to have a physical examination, but no mental examination or technical examination, and they have never yet called those men. Those men can be got yet, large numbers of them. I gathered large numbers of men into Kansas City at one time, and we waited 10 days for some means of transportation for those men, and they got disgusted and scattered.

Senator NELSON. Have you informed the Shipping Board of this?

Mr. FRANKLIN. Absolutely. I have informed every Government official that we could get in touch with just what was going on. These are facts that numbers of men in Washington know to be facts.

I turned over a list of all those names to the Adjustment Board to show that board that if the proper method is taken to get men they can be secured; but to just simply go at it haphazard and advertise that we are listing a lot of recruits and all that sort of thing—the men are not going to stay around until they are called. A man has got to go and get the job then, because he is not going to pay board wating for somebody to ship him to his work. He can not afford to do that.

Senator NELSON. I judge from your statement that you do not concur in this idea that has been promulgated in one form or another before this committee, the idea of holding meetings, making patriotic speeches, and working up recruits in some such way as that. You do not think that is necessary?

Mr. FRANKLIN. That won't get them.

Senator NELSON. You seem to be on the right track. Now, I would only suggest one more thing—you may be doing it for all I know—and that is that wherever you see a strike crop up it should be the duty of your order to go and stop that strike and get the men to work. Do you not think that ought to be your duty?

Mr. FRANKLIN. Absolutely.

Senator NELSON. And especially repress what I call "sympathetic" strikes; by that I mean where they are not striking for just their own benefit, but because of something that has been done to somebody else. In that case you referred to, they were evidently striking because the owners of the ship did not treat properly the men who operated the ship.

Mr. FRANKLIN. That is right.

Senator NELSON. I would call that a species of sympathetic strike.

Mr. FRANKLIN. That was.

Senator NELSON. Allow me to add one word. I noticed day before yesterday that at some place which I have forgotten 5,000 men struck and would not work on Lincoln's birthday unless they got double pay. Did you notice that in the papers?

Mr. FRANKLIN. Yes; I saw that article in the papers, that they refused to work.

Senator NELSON. Unless they got double pay?

Mr. FRANKLIN. That is a condition they have had in the yard all the years that shipbuilding has been done in this country—overtime for holidays. Let me give you an illustration of what the employer has done. In Baltimore they have been paying double time for overtime, Sundays, holidays, and nightwork. When a man was required to work all day and then came back and worked a night they paid him double time. When the Government took over the yard, the employers said, "The Government only allows time and a half; we will cut you down from double time to time and a half." Well, the men continued to work. They said, "This is Government work; we will go along until the thing is settled." I eventually got it settled, through Mr. Stevens, of the Shipping Board. We have had an understanding with the Government that in no

yard or shop or factory of any kind where the Government has taken it over and is doing the work will the men be required to work under less favorable conditions than they had in effect when the Government took the yard over, and I do not think they could do anything less than that.

But to get back to the point you raised about keeping the men at work. We got the men to go back to work in Savannah under the most deplorable conditions. In normal times there would not have been a man who would go back into that yard under the conditions under which we got them to go back. We prevailed upon them to do this and to await the decision of the wage adjustment board, which would go into all these evils that they complained of.

Senator NELSON. It was more than a question of wages?

Mr. FRANKLIN. Oh, yes. Let me say this, that I think it has been demonstrated to the satisfaction of the wage adjustment board, and will be to the satisfaction of the Shipping Board, that the evil in that yard lies purely in the fact that there has been an internal row among the officials of the company who are lined up as two factions. One faction resigned in order to force the other faction out of the yard, and then the other side sent in their resignations to force the first side out. Then a Government official stepped in, and this was done at his suggestion. This is the report that came to me, and I am giving it for what it is worth. It was stated by men who worked in the yard and are familiar with the facts and say they are ready to testify to the absolute correctness of the statement. This man went to one of the factions and said, "The only way for you to fight this thing is for you to send in your resignation and demand the dismissal of the other faction." Then he goes to the other side and tells them the same story. The two factions resigned, and the company then, at his suggestion, accepted the resignations of all of them, and he has taken the place of the superintendent of the yard.

Senator RANSDELL. This Government official?

Mr. FRANKLIN. This Government official; he was an inspector down there. That had been going on for some time, and you can understand the inefficiency of a yard where the workmen are bound to be affected by the result of a fight that is open and aboveboard between the different factions of the men they have got to work under and work with as a supervisory force.

The living conditions there are deplorable. The yard is away out in what is known as a black-gum swamp. There is a highway built out there, and on each side of it the ground slopes off into the swamp. The ground never dries out. In the summer the water is covered with a green scum. The place is surrounded by canebrakes, and nothing can live in the place except malaria, frogs, and mosquitoes. From what the men tell me, it is really a crime to build houses and expect men to live in the place where they are attempting to prevail upon the men to live.

Now, if they do not live out there it takes them three hours each day going and coming to and from their work. Half the time they have to bring them up the river on those boats, and the boat sticks in the mud, and they are out there until 10 or 12 o'clock at night.

Senator JONES. How are they going to get the Government ships out of there, then?

Mr. FRANKLIN. They go down the other way.

Senator NELSON. Evidently that yard is in a bad place, according to your description.

Mr. FRANKLIN. I am not in a position to say why a yard was built in such a place. As I understand, it is several miles outside of Savannah, on a river.

Senator NELSON. An old-established yard?

Mr. FRANKLIN. No; it is a new yard. I understand it has been built there only within the last six months.

Senator NELSON. It is one of these yards of the Emergency Fleet Corporation?

Mr. FRANKLIN. Yes; it does fabricating work.

Senator JONES. How many Government ships are they building? Do you know?

Mr. FRANKLIN. No; I could not say that.

Senator NELSON. I want to call your attention to another thing that was said here, in order that you may have an opportunity to explain it. I can not recall the names, but it was claimed in the hearings before the committee that owing to the fact that wages have been increased so much, and especially day wages, with this bounty of 10 per cent for extra work, etc., the effect was this, that men would only work a part of the week—three, four, or five days—and on account of the increased wages they would earn so much they had no disposition to work the full week; and to overcome that they offered this bounty of 10 per cent for all that worked six days in the week. I call your attention to that in order that you may explain it.

Mr. FRANKLIN. Have you read the agreement, Senator, that was entered into with the Shipping Board and the Navy Department at the time that 10 per cent was given?

Senator NELSON. No; I have not.

Mr. FRANKLIN. I have it here. I would like to have you look at it.

Senator NELSON. You can tell me the substance of it.

Mr. FRANKLIN. It was that the 10 per cent was given, not as a matter of war emergency but as an inducement for the men to give continued service, and as a further compensation because of the increase in cost of living up to the time the wage adjustment board had computed the increased cost of living, which was July 1.

Senator NELSON. They increased it to how much?

Mr. FRANKLIN. They made it 31 per cent, and 10 per cent was added because the statisticians claimed that, according to Government reports and available figures, the increased cost of living had been about 8¼ or 8½ per cent from that time. In order to compensate the men for that increase they agreed to give the 10 per cent as a war-emergency measure; they simply used that term in order to avoid interfering with the work of this adjustment board, and on the 1st day of February it was to become a permanent increase. They simply used that term, Senator, in order to avoid any semblance of interference with the Adjustment Board.

Senator NELSON. Some of them agreed with you that it was a general increase, but I think at least one of them said it was for the purpose of inducing the men to work six days a week; that it only applied to those cases; but I think that was afterwards abandoned——

Mr. FRANKLIN. No; not wholly. It continued until February 1, with a proviso that the men should work six days a week, 48 hours a week, unless prevented by sickness. That was to prevent the men from voluntarily laying off and staying away from work without any cause. But on the 1st day of February it became a permanent increase, and it no longer has any strings to it.

Senator NELSON. No; but it was claimed here by one or two men—I can not recall their names at this moment—that the effect of this increase, as they claimed it to be, in wages, was that there was a disposition among a good many men to lay off; that they would not work but three or four days in the week; and they earned so much then that they did not see the necessity of working the entire week.

Mr. FRANKLIN. That is incorrect, Senator. Here is an example of what is being done everywhere. At the investigation held in Philadelphia, Mr. Mull, of the Cramps shipyard, stated on the stand that his men were working steadier at his plant than they had ever worked in the history of the yard. In other words, that they were working more nearly full time. That is true of every yard I have been able to get information about. The men are not laying off, except that perhaps a man may work to-day and four or five hours to-night, and may not come in again until noon to-morrow, or they may take a full shift off.

Senator NELSON. I think the men who made this statement before the committee were from the Pacific coast, and referred to yards on that coast particularly.

Mr. FRANKLIN. Well, I do not think that is correct. From the information I have, it is not correct.

Senator NELSON. I simply called your attention to it, because I wanted you to have an opportunity to meet it.

Mr. FRANKLIN. When I saw that these statements had been made I immediately wired to Oakland, San Francisco, and Seattle for definite information, for the facts, and, without exception, they wired me that the men were not laying down on the work or falling off in output, except on account of conditions over which they have no control. They say that the failure to have work prepared in time, faulty tools, and various other conditions have in many instances caused a falling off, but that is not due to the failure of the workmen to perform their duty efficiently if given an opportunity. Of course, there are individual cases in the shipbuilding industry, as in every other industry, where men will possibly shirk or lay down on the work. That is true at all times and in all industries, and probably will always exist, regardless of what the conditions or wages may be. But those are exceptions; they are not the rule. The great mass of workmen are, I believe, just as loyal, just as patriotic, and desire just as much to maintain the output as is possible for any citizen; and I feel that this malicious charge against the shipbuilders is so unfounded, unwarranted, and untrue that the matter ought to be gone into and investigated to find out where the fault lies.

We are willing to have a searching investigation. If we are at fault, if our men are at fault, let it be shown. If there is some other reason for it, let the general public know it and let the Government know it. We do not believe that we should be asked to remain under such a charge as has been made—that men are delib-

erately laying down on the work and trying to interfere with the shipbuilding program and reduce the output, for we know what the output means to this country. We know the state of the shipping—we know something at least—and we know the urgent necessity for ships and more ships, and we are willing, as far as the organization and the great mass of the men are concerned, to do everything in our power to assist the Government in getting those ships into the water. We believe that something ought to be done to stop this charge being scattered broadcast over the country, charging the men with being unpatriotic and failing to perform their duty. It seems to me it is becoming a general practice to charge labor with the responsibility for whatever defects and failures have developed from every cause and to make labor the "goat."

Senator RANSDELL. I think you will understand that the committee is trying, as well as it can, to make a dignified examination of the whole subject, and we have not sought any particular class of testimony. These statements have come out before us, and if the press has given big headlines to these charges we hope it will give just as big headlines to your refutations.

Mr. FRANKLIN. It seems to me that there ought to be some means through this committee or through some other agency, by which the Government could have an investigation made and let these people who have made the charge produce their evidence or forever keep still.

Senator RANSDELL. This committee is really giving a great deal more time to the refutation than to the charges. Those charges came out incidentally, as I recall, in testimony that has been brought out here, while we have heard you fully and heard Mr. Gompers fully and we will hear anybody else in refutation that you wish to present. We can not make the press publish these statements, but they generally treat people right, and I hope they will treat you right.

Mr. FRANKLIN. I want the facts as to the actual conditions in these yards developed. It might be an excellent thing to make such an investigation as a medium of speeding up; it might develop really where some of the weak parts are if it could be done by a committee that would go into the matter in a proper way.

Senator RANSDELL. What would you say is a proper way?

Mr. FRANKLIN. By a committee to visit these yards and get the actual facts right in the yards; get the men who are on the job and the foremen who are on the job.

Senator RANSDELL. How long will it take a committee to do that?

Mr. FRANKLIN. Well, it would take some time to do it.

Senator RANSDELL. It would take several months to do it and do it properly, would it not?

Mr. FRANKLIN. It would not take several months; they could take several yards that are typical of them all and go into them.

Senator NELSON. You have heard of the Hog Island Yard, have you not?

Mr. FRANKLIN. I have.

Senator NELSON. Are you familiar with the conditions there?

Mr. FRANKLIN. Some of them.

Senator NELSON. What can you tell us about that?

Mr. FRANKLIN. I can not tell you anything definite, because I have not been on the ground. All I could tell you would be from

hearsay, and I do not want to go into so big a question until I have actual knowledge of the facts.

Senator NELSON. Have you visited the Submarine Boat Co.'s yard?

Mr. FRANKLIN. No; I have not; I am going to.

Senator NELSON. Or the Merchant Shipbuilding Co.'s yard?

Mr. FRANKLIN. Not yet.

Senator NELSON. There are three yards—Hog Island and these two others—that are built on the same plan; that is, the Government is building the yard, practically.

Mr. FRANKLIN. These boats are, some of them, fabricated, are they not?

Senator NELSON. They are all to be fabricated boats.

Mr. FRANKLIN. What would you think of the efficiency of a yard if the keel was laid and the men were ready to start on it and when they went to fit the plates they found the plates they had on the ground belonged to a different boat, and then the keel had to be taken down or else left standing while they put up a keel of another boat, and even after they got part way on that they found the plates belonged to still another boat? Can you imagine how any efficiency under such circumstances could exist?

Senator JONES. Where did that occur?

Mr. FRANKLIN. I am just citing a case that might occur.

Senator JONES. I would like to know. That is one of the things we are trying to find out.

Mr. FRANKLIN. As I said before, some of the things I am giving from hearsay, but I am going to find out about them. I just state that as a case that is typical of some things that have come to me in the way of information.

Senator JONES. Was this Government work?

Mr. FRANKLIN. Yes, sir.

Senator JONES. Where was it alleged to be taking place?

Mr. FRANKLIN. Well, it was alleged to take place on one of these yards the Senator mentioned—at Bristol.

Senator JONES. I think that is a matter that this committee can very well look into.

Mr. FRANKLIN. You can very well understand how that happened. The parts for the fabricated ships come to the yard, and the material gets mixed up, and they ship the wrong plates for a boat—there are many ways, you know, that that inefficiency might occur.

Senator JONES. Mistakes like that occurring very often might be very expensive.

Senator NELSON. I want to ask one final question: What can you suggest ought to be done to expedite our shipbuilding program? You know in a general way the program the Government is engaged in. What can be done and what ought to be done to expedite that work?

Mr. FRANKLIN. Well, I think the only practical thing to do is to endeavor to get all of the efficient, practical men possible into the shipyards—to go about getting them in a practical way—and to urge upon the men in all yards to do their very best to maintain the output of the yards. I do not know of any other practical way to do it.

Senator JONES. And have the jobs ready when you send the men to them?

Mr. FRANKLIN. Have the jobs ready. There is no use sending a man to a place where there is nothing for him to do. I understand there was a lot of men brought to work in the Hog Island yard, and they said, "We are not ready for you. You can go to work for us over at the New York Shipbuilding Co."

Senator NELSON. They have had hundreds of men and told them they were not ready to put them to work.

Mr. FRANKLIN. The trouble is in the mistakes that have been made in sending them to places where they were not prepared for them and the failure to send men where they were needed at the proper time, the failure to get these men together and ship them. When men have been got together there has been too much red tape in arranging to ship them, and the men would get disgusted and say, "There is no employment here for me. I do not have to wait; I can get a job here."

Senator NELSON. What have you to say about the housing question?

Mr. FRANKLIN. That is one of the serious problems now. I was advised some two weeks ago that there was not a house to be had in Seattle; that a man going in there could not get a house to live in; that a married man could not take his family there because there was no place for them; that there were a few rooms where there would be possibly three or four men in a room together. And Mr. Nolan has just called my attention to the fact that at Newport News the housing situation is acute.

Senator JONES. You understand, they have actually started work there on housing?

Mr. FRANKLIN. Yes.

Senator RANSDELL. You understand, also, that we passed a bill in the last day or two, and it is in conference now and will be agreed to to-morrow, I hope, that will make $50,000,000 available to build the houses?

Senator NELSON. In some cases they need transportation facilities?

Mr. FRANKLIN. They must have them. If you are going to ship men you have got to arrange for transportation.

Senator NELSON. I mean transportation from where they live to their work.

Mr. FRANKLIN. Oh, yes; this Savannah case is an instance of that. There are numbers of others.

Senator NELSON. We have one case up there at Staten Island that was very acute.

Mr. FRANKLIN. I am sure that the international union will do everything in its power to cooperate in getting men, in seeing that the proper distribution is made. It is not so much a question of going out and getting a few men as it is of having some one who knows just where they should be sent, so as to distribute the men properly that are secured and send them where they are needed. If all those advertisements for 250,000 men and all those scary figures and statements that are going out are discontinued, and we go at the thing in a proper way there is no question that the men could be secured.

Senator RANSDELL. Have you any other witnesses to be heard to-day? I understood Mr. Nolan was to be heard.

Mr. NOLAN. I just wanted to say a few words, Mr. Chairman.

Senator JOHNSON. Before Mr. Nolan begins I wanted to call the committee's attention very briefly to one thing. You will recall, Mr. Chairman, that when Mr. Baldwin was on the stand the other day there were repeated questions asked of him by Senator Nelson, Senator Jones, and myself respecting the contract that was entered into between Stone & Webster and the American-International, concerning which Commander Reed testified. I want the committee to have in mind, please, the testimony of Mr. Baldwin in that regard—I shall not read it, but it is in galleys 20 and 21—wherein he denied that there was any such contract, subsequently said that it was a part of the original agreement that was made between Stone & Webster and the American-International, and then was quite indefinite concerning the matter. I do not want to comment on the testimony, and I dislike even to refer to it as indefinite, but if the committee will read that testimony it will be illuminating as to all of the testimony of Mr. Baldwin.

Now, I want to call your attention to the contract left here by Commander Reed, dated December 28, 1917, between the United States Shipping Board Emergency Fleet Corporation, by its agent, the American International Shipbuilding Corporation, and Stone & Webster, under the terms of which Stone & Webster were from time to time to furnish the services of such of their employees as may be desired by the Fleet Corporation; and whereby they also agreed to furnish such instruments, stationery, drafting, and office supplies as may be desired by the Fleet Corporation; and whereby the United States Fleet Corporation agreed to pay for all of such matters and things furnished and all of such services all the bills of Stone & Webster in connection therewith, transportation, expenses, and services of such employees, and to pay them the amount that was suggested by Commander Reed when he testified.

I want to call your attention as well to one of the specific subcontracts entered into, which was given to us by Commander Reed, dated November 3, 1917.

Senator RANSDELL. May I ask, Senator Johnson, if you desire to put the whole contract in the record?

Senator JOHNSON. I do; but I wanted to point the thing by calling your attention to this particular matter. This was a specific contract, the contract of the Arthur McMullen Co. Under this the subcontractor agreed to furnish executive officers, business organization, various equipment, and the like, and was to receive $38,500; and the cost of the work was to include costs of materials, cost of small tools and construction equipment, except that furnished as above specified; the cost, at salary rates, of men in the engineering and drafting departments of the principal office of this subcontractor or in the field; the cost of a works office, including salaries of a superintendent of construction, an accountant, and such assistants as they may require; and traveling expenses or expenses of a similar character that might be made by the subcontractor.

I call this to your attention specifically, because of the statements that have been so repeatedly made that we originally contracted with the American International for engineering skill, supervising skill, and the like, and all of the "know how," and then we subcontract for

it with these various subcontractors, who do the specific work at this place. With your permission I will have these contracts put in the record.

Senator RANSDELL. The contracts submitted by Commander Reed will be published in the record at this point. Is there anything further, Senator Johnson?

Senator JOHNSON. That is all, sir.

(The contracts referred to are here printed in full, as follows:)

CONTRACT BETWEEN STONE & WEBSTER AND UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION BY ITS AGENT, AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION.

This agreement made this 28th day of December, 1917, between the United States Shipping Board Emergency Fleet Corporation, a corporation organized under the laws of the District of Columbia, representing the United States of America (hereinafter called the Fleet Corporation), by its agent, American International Shipbuilding Corporation, and Stone & Webster, a partnership having its principal office in the city of Boston, Commonwealth of Massachusetts (hereinafter called the firm), witnesseth, that—

Whereas on account of the urgent necessity for expediting in every possible way the work under the contract dated September 13, 1917, between the American International Corporation and United States Shipping Board Emergency Fleet Corporation, for the construction of a shipyard and ships at Hog Island, Delaware County, Pa., the Fleet Corporation has obtained, and may from time to time obtain, the services of specially trained employees of the firm for limited or intermittent service; and

Whereas on account of the necessity for expediting the work under said contract the Fleet Corporation has obtained and may from time to time obtain, and the firm has furnished and will from time to time furnish, instruments, stationery, drafting and office supplies; and

Whereas it is deemed proper to have on record the understanding as to the remuneration to be paid by the Fleet Corporation to the firm for such services and instruments, supplies, etc.:

Now, therefore, in consideration of the foregoing, the parties agree as follows:

1. The firm has furnished, and agrees from time to time to furnish, for work under said contract, the services of such of its employees as may be desired by the Fleet Corporation which in the opinion of the firm may be applied to said work.

2. Upon receipt of proper bills therefor the Fleet Corporation agrees to pay to the firm for the services of such employees a sum equal to twice the amount at which such employees are carried on the pay roll of the firm, which sum is understood to be equivalent to the cost to the firm of furnishing said services.

3. The firm has furnished and agrees from time to time to furnish for work under said contract, such instruments, stationery, drafting, and office supplies as may be desired by the Fleet Corporation which in the opinion of the firm may be applied to said work.

4. Upon receipt of proper bills therefor, the Fleet Corporation agrees to pay to the firm for such instruments, stationery, drafting, and office supplies, the actual cash cost to the firm of such instruments and supplies.

5. Upon receipt of proper bills therefor, the Fleet Corporation also agrees to pay the expenses incurred for transportation, hotel, meals, and similar purposes in connection with the furnishing of the services of said employees for the work under said contract and also to pay all transportation and similar charges in connection with furnishing said instruments and supplies for work under said contract.

6. Upon receipt of proper bills therefor, the Fleet Corporation also agrees to reimburse the firm for any telephone, telegraph, mail, or other expenses incurred by the firm or its employees in connection with work under said contract.

7. All services, instruments, stationery, drafting, and office supplies shall be furnished and all expenses shall be incurred only subject to the approval of the duly authorized representatives of the United States Shipping Board Emergency Fleet Corporation.

In witness whereof the United States Shipping Board Emergency Fleet Corporation has caused this contract to be executed on its behalf by its agent, American International Shipbuilding Corporation, and Stone & Webster has caused this contract to be executed on its behalf by one of its partners the day and year first above written.

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION,
[SEAL.] By AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, *Its Agent.*
By WALTER GOODENOUGH, *General Manager.*

Attest:

CHESTER M. CLARK,
Assistant Secretary.

Approved December 28, 1917.

P. L. REED,
Resident Engineer, Emergency Fleet Corporation,
Division of Shipyard Plant.

STONE & WEBSTER,
By RUSSELL ROBB,
A Partner.

A correct copy:
P. L. REED.

Contract No. 83-S. C.
P-10
NOVEMBER 3, 1917.

AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION,

Agent for United States Shipping Board Emergency Fleet Corporation.

We hereby propose to construct for you at the new shipbuilding plant at Hog Island, so called, near Philadelphia, Pa., group 5, consisting of ten (10) launching ways, each approximately five hundred forty (540) feet in length, of wooden-pile construction, as shown on your plans.

We will at all times in the prosecution of the work hereunder use our best efforts to protect and subserve your interests, and we further agree to undertake this work promptly, to prosecute it diligently, and to entirely complete it at the earliest possible date

I. SERVICE TO BE RENDERED.

With respect to this work, we propose to act as your agents, being guided in all respects by such instructions as you may from time to time give us.

We will furnish at our own expense—

(*a*) The service of our executive officers, who will direct and oversee the work.

(*b*) Our business organization and the services of our principal office accounting, auditing, purchasing, and other forces, in so far as required.

(*c*) All other expenses of our principal office except only the salaries of men in the engineering and drafting departments for the time they are engaged on the work.

(*d*) The services of all the above-mentioned personnel in organizing and supervising the work.

(*e*) Equipment as follows:

Eight land pile-driver leads, with rollers, but without lines or blocks; four 0-foot leads; four 60-foot leads.
Eight standard double-drum hoisting engines.
Eight pile hammers—four steam, four drop.
One air compressor of ample capacity for the requirements of this job.
Six pneumatic boring machines.
One concrete mixer.
One diving outfit.
One locomotive, 36-inch gauge.
Six flat cars.
Four hundred horsepower in boilers.
One floating pile driver.
One mile 45-pound rail.

II. COMPENSATION.

We are to receive as compensation for our services and for the use of our equipment as above mentioned the sum of thirty-eight thousand five hundred dollars ($38,500), payable in installments of seven thousand five hundred dollars ($7,500) on the last day of each month, commencing with December, 1917, until a total of thirty thousand dollars ($30,000) is paid, and the balance of eight thousand five hundred dollars ($8,500) on the completion of the work "and your approval thereof."

If material change in the scope of the work is ordered by you, there shall be added to or subtracted from this amount of thirty-eight thousand five hundred dollars ($38,500) a sum equal to five per cent (5 per cent) of the estimated cost of such work as is added to or deducted from that now contemplated.

III. COST OF THE WORK.

It is understood that "cost of the work," "as determined by the local auditor of the Emergency Fleet Corporation, subject to appeal to the general manager of the Emergency Fleet Corporation," shall include the following, whether commitments or expenditures are made by you direct or by us for your account:

(*a*) The cost of all materials and labor entering into the work.

(*b*) The cost of small tools and construction equipment except that to be furnished by us as above specified.

(*c*) The cost, at salary rates, of men in the engineering and drafting departments of our principal office or in the field, in connection with any engineering, designing, and inspection work we may be called upon to do in connection with this work for the time actually engaged on the work.

(*d*) The cost of a works office, including the salaries of a superintendent of construction, an accountant, and such assistants as they may require; the cost of all field engineering and inspection required; and the expenses of maintaining a works office.

(*e*) The cost of insurance and any expense incurred in connection with any accident or damage to person or property.

(*f*) Any traveling expenses or expenses of a similar character and any other expenditures which we may make except for items specified in Section I, as furnished at our own expense.

(*g*) Freight and towing charges and loading and unloading expenses paid by us for and in connection with the transportation of construction machinery and equipment furnished by us to and from the place of "the" work, provided that the charges for transportation or towing of such construction machinery and equipment over distances in excess of two hundred (200) miles shall require your special approval.

IV. DISBURSEMENTS.

You are to reimburse us promptly on account of all payments made to meet our pay rolls for men employed at the work and are to pay us monthly upon bills to be rendered by us and supported by proper vouchers for any salaries or wages paid or other expenses incurred on account of the work hereunder by us from our principal office, subject to approval for each payment by the local auditor of the Emergency Fleet Corporation.

V. PURCHASES AND CONTRACTS.

You are to furnish us on our requisition with all equipment, hand tools, materials, and supplies required for the work except items to be furnished by us as specified in Section I.

VI. INSURANCE.

Unless otherwise directed by you, we will place such insurance in the names of the United States Shipping Board Emergency Fleet Corporation and yourselves for your respective accounts as well as ours, covering liability to the public and to employees engaged on the work, with limits of $10,000 for any one person and $20,000 for any one accident, unless workmen's compensation laws make it advisable to secure insurance in some other form or amount. The policies will be in the usual form.

VII. AUDIT.

Our correspondence, records, vouchers, and books of account, in so far as they apply to the work done under this agreement, "will as far as possible be separately kept and" will always be open to your inspection.

VIII. TERMINATION OF EMPLOYMENT.

If at any time you should become dissatisfied with the manner in which the work is being conducted, or should you wish for any reason to discontinue the work, you are at liberty, after 10 days' notice in writing to us, to terminate our employment and take possession of the work done and materials on hand for use therein.

In case you take such action, we shall be entitled to receive for our services five per cent (5%) of the cost of the work to the time of termination, plus a rental for our plant from this date to such time of termination, at the rate of two thousand one hundred thirty-three dollars ($2,133) per month less such rental as may have already been paid us for such use. We shall also be at liberty to remove our plant from the site of the work.

IX. LABOR.

We will comply with all instructions not contrary to law, as to wages or conditions of employment of labor on this contract, given to us by you in writing.

X. LIEN CLAUSE.

We agree that we will not permit any person to file any liens for materials furnished and labor performed in connection with this work, and we agree to deliver the work to you free from any lien or incumbrance. In the event of the filing or attaching of any lien or incumbrance against said work before final payment, you may satisfy the same out of any amount not paid to us hereunder, or you may, at your option, withhold the amount thereof from any payment thereafter coming due hereunder.

XI. ACCEPTANCE AND APPROVAL.

On acceptance of this proposition by you, it will constitute an agreement between us.

ARTHUR MCMULLEN COMPANY,
By GEO. B. PALMER, *Vice President.*

Accepted November 7, 1917.

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
By AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, *Agent.*
By WALTER GOODENOUGH,
General Manager.

Approved.

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
By P. L. REED,
Resident Engineer.

NOTE.—Estimated cost of work under this contract, $700,000. Fee $38,500, of which $27,500 is for services and $11,000 for rental of equipment supplied by contractor.

P. L. REED.

Senator RANSDELL. We will hear you now, Mr. Nolan.

STATEMENT OF MR. THOMAS NOLAN, VICE PRESIDENT INTERNATIONAL BROTHERHOOD OF BOILER MAKERS, IRON-SHIP BUILDERS, AND HELPERS, WASHINGTON, D. C.

Senator RANSDELL. Will you please state your name?

Mr. NOLAN. Thomas Nolan.

Senator RANSDELL. What is your official position, Mr. Nolan?

Mr. NOLAN. Vice president of the International Brotherhood of Boilermakers, Iron Shipbuilders, and Helpers.

Senator RANSDELL. Mr. Nolan, proceed, please, in your own way, sir, and bring out any points you desire.

Mr. NOLAN. Mr. Chairman and members of the committee, it is very evident to the committee that I am a member of the old school, but, fortunately, I have kept pace with modern conditions, and being thoroughly familiar with the shipbuilding industry, in consideration of the charge that has been made against the men whom I represent officially, under Mr. Franklin, the president of that organization, and coming in contact with them, knowing the situation, and knowing the peculiar conditions in the shipping industry, I felt it my duty, if I could get an opportunity, to appear before this committee for the purpose of absolutely denying those charges as a whole.

I have been employed by the United States Government for over 20 years——

Senator NELSON. In what capacity?

Mr. NOLAN. As a shipbuilder. I have worked for the Newport News Shipbuilding Co. for several years, and I believe I am in a position to know just exactly the status of affairs in connection with the production or nonproduction of shipyards. I do not desire to occupy any time, because Mr. Franklin has so thoroughly covered the situation, the conditions, the improvements that could be made, and the supplying of men to the Government. I have gotten men myself, by the instructions of President Franklin, in many parts of the southern States for the Navy Department—in New Orleans, Mobile, Jacksonville, and those sections they secured men by his instructions for the United States Navy. And what made me feel so hurt in connection with it was that in attending meetings of those associations and in the discussion of present conditions and war problems, on every occasion those men would voice their sentiment, either by motions or by resolutions, that it was their bounden duty as citizens of this country and shipbuilders and boiler makers to do everything possible to stand by the Government.

In connection with this shipbuilding proposition I am glad that Mr. Franklin has suggested an investigation. If an investigation was held, even though it might take a month or two, it would clear up a bad, complex situation in connection with the shipbuilding industry of our country at the present time. When the war was declared against Germany, and the absolute necessity of ships to carry supplies over there became apparent, and in order to get those ships there had to be competent men, it often surprised me that the Shipping Board or the Government, as a whole, did not have in every yard in this country a practical shipbuilder directly under the supervision of the Government to make a record of the men employed, the conditions in that yard, the obstacles to the production of ships, etc., so that there might be a correct solution of the whole problem. As to those charges, as Mr. Franklin says, there may be individual cases, but I know from experience, from working at the vise, coming in contact with the men, the personnel of the men, etc., and I know that at the present time not only the boiler makers and shipbuilders but every labor organization in this country is loyal to this Government, doing everything they possibly can do to support it in this crisis, and will continue to do so. Every officer of a labor organization that I know of is going about the country using every influence encouraging the men to support the Government, not only by their labor but

nancially, doing everything they can. And then, those charges are ade that the men are laying down, that they are slackers, etc. In he face of those facts, Mr. Chairman, I believe that if it is feasible n investigation should be held and the responsibility should be fixed here it belongs.

Senator NELSON. I do not believe the charges have covered the aders of labor organizations. I think the witnesses have all admitted that, as a whole, they have been loyal and patriotic and done ll they could; but they say that they have not always been able to ontrol their men, that some of the men are not like their leaders in at respect.

Mr. NOLAN. I tell you, Senator, if there is a body of men working gether in any shipyard and there is no discipline there by some eans, by an organization or otherwise, how are you going to control em? If every man has his individual right——

Senator NELSON. If you have it, for instance, as it is up at Hog land.

Senator RANSDELL. I understood from Mr. Franklin that a great any men in the yards do not belong to the unions anyway.

Mr. NOLAN. Oh, yes; a great many of them. You take the condions in any well-organized plant, under the supervision of a reonsible organization, whose laws govern as far as disclipline is ncerned—I will give you an instance, Senator. You take this southstern territory, comprising 12 or 14 different lines of railroads. very man employed on those railroads, up to 100 per cent, belong the organization; and we all know that since that organization as perfected, under the jurisdiction and protection of conservative ws and conservative officers, there has not been a labor trouble in at district in nine years.

Senator RANSDELL. What constitutes that territory?

Mr. NOLAN. Louisiana, Mississippi, Georgia, North and South arolina, Virginia, Alabama—all the railroads that run through that ction. Everyone that is at all familiar with the labor situation ows that we have not had a labor trouble in that territory in years.

Senator RANSDELL. I have not heard of any.

Mr. NOLAN. They came right here to Washington and met the neral managers of those railroad companies up here in the Union ation and were in conference together for months on a wage scale r all the different mechanics employed in those shops. They made agreement to govern them, and there is a clause in that agreement at whenever either party desires a change they are at perfect libty to do so and call a conference. That is the result of practical ganization.

In connection with that, they can not go on strike; it is an imssibility. If the men take it into their heads to go on strike they e disciplined by the organization and forced out of the organizaon. Those officials in the southeastern district will all tell you that ey are very much pleased, especially when you take into consideraon the fact that in other sections of the country you have it day in d day out while they have no labor trouble there at all.

Senator NELSON. You have not any I. W. W. down there, have you?

Mr. NOLAN. Well, I tell you, there is a class of people I have not uch use for.

Senator NELSON. We are afflicted with some of them in the Northwest.

Mr. NOLAN. Yes; I know you have a liberal share of them out there. Fortunately we have not any in that district. There is a pretty fair grade of intelligence among the mechanics in that district. Of course there is a good deal of colored labor there, but it is all common labor.

Senator JONES. You concur generally in Mr. Franklin's statement before the committee?

Mr. NOLAN. Oh, yes; I concur in his statements.

Senator RANSDELL. Have you gentlemen anyone else with you that desires to be heard? If not, we are very much obliged to you.

Senator RANSDELL. We will now hear you, Mr. Vanderburgh. State your name, residence, occupation, and so on.

STATEMENT OF MR. SHELDON D. VANDERBURGH, YONKERS ON THE HUDSON, N. Y.

Mr. VANDERBURGH. My residence is Hastings on the Hudson at present; my permanent residence in the winter is Yonkers on the Hudson.

Senator RANSDELL. In what State is your residence?

Mr. VANDERBURGH. New York; and I am an architect and builder.

Senator RANSDELL. Where have you been engaged working recently?

Mr. VANDERBURGH. Just now at Hog Island; that is my employment.

Senator RANSDELL. You stated to me that you wished to give some testimony to this committee. Will you proceed in your own way? I really do not know what it is you wish to bring out.

Mr. VANDERBURGH. I want to say in regard to this matter which I showed to you —

Senator JONES (interposing). What have you been doing at Hog Island?

Mr. VANDERBURGH. I have been foreman carpenter.

Senator JONES. That is, you have had charge of a body of carpenters?

Mr. VANDERBURGH. Of a body of carpenters; yes, sir.

Senator JONES. Doing what?

Mr. VANDERBURGH. Various kinds of work—working on different buildings, putting up buildings, and assisting in putting up buildings.

Senator JONES. How long have you been there?

Mr. VANDERBURGH. I went there on December 18, and then I went home over Christmas and came back after a few days, and have been there ever since.

Senator JONES. Are you still employed there?

Mr. VANDERBURGH. I am not discharged, although I do not suppose now they will welcome me back, because this is voluntary on my part and I am entirely alone in it; no one suggested it to me at all.

Senator JONES. That ought not to be any reason for your discharge, if you tell the facts.

VANDERBURGH. I think it is apt to be, because I can show you things that it occurs to me as though they did not exactly with the sincerity that some of the officials stated here.

ator RANSDELL. Do you appear before us in obedience to what eem to be a patriotic duty, to give certain facts and informa- › us?

VANDERBURGH. That is my idea, exactly. I have come here ' own expense because I could not stand to see some of the ı going on at Hog Island, and that is all there is to it. Do you ne to read this [referring to paper]?

ator RANSDELL. You understand, Mr. Vanderburgh, that the lent has suggested to the Department of Justice to make an nation of conditions at Hog Island?

VANDERBURGH. It needs it.

ator RANSDELL. You can make any statement that you wish.

VANDERBURGH. You read this paper, I believe. Is it all right ɜ to read it?

ator RANSDELL. If you wish to put it in the record, I have no ion. It will not be necessary to read it.

ıe printed matter submitted by Mr. Vanderburgh is here ɔd in full, as follows:)

OUR BOYS MUST NOT BE MURDERED.

Say, fellows, do your bit!
  Your brothers and cousins are going to war.
Will you help the enemy
  Spill your kin's gore?
If you shirk your duty,
  You hit unaware
The man or the boy
  For whom you most care.

The Germans are getting
  The Russians—and why?
They don't pull together.
  So, now let us try
And show the whole world
  That Uncle Sam's boys
Are there with the goods
  As well as the noise.

European mechanics
  Work hard for poor pay;
Uncle Sam gives two bits
  For each board that you lay.
The work must be finished
  And finished right quick;
So work with your might, boys,
  And show that you stick.

Each day of delay *now*
  In building camp hives
Is sure like to cost us
  A thousand more lives.
So work with a will, boys;
  No one must hold back.
Let nobody call
  An American "Slack."

ıP UPTON, L. I., *September 14, 1917.*

pyrighted by Sheldon D. Vanderburgh.)

Senator JONES. Why do you not state the facts without getting them out of a paper?

Mr. VANDERBURGH. The only reason I read that is because it shows—it states facts in it, and it shows conditions at Hog Island.

Senator JONES. You can put that in the record and state the facts.

Senator RANSDELL. Put that in the record and state any facts you wish.

Mr. VANDERBURGH. All right. The question of sincerity and the unintentional mistakes, seems to me, as though that can not be put forward in such cases that have existed at Hog Island. Take, for instance, the question of sending men who had finished their day's work, as I understand it—I want it understood right here, of course, while I have been at Hog Island, I have seen so many things myself that I consider was robbing the Government, every one of these things are not what I have actually seen myself, but I am not stating anything here that I have not the belief and sufficient reason to believe will be backed up by the records at Hog Island, and in this case that I just stated, I took the numbers of the men who were working on the job, and it is easy to refer to it. For instance, I was told about 200 men—possibly that may be a little exaggerated—who were sent out on a Saturday afternoon, after they had finished working on their jobs at 3.30, and thought their day was over, thought their work was done—Saturday afternoon and Sunday is double time—sending those men about a mile away from the place to work on the end of the fence, which is a job there is no hurry for, and it has generally been used to put men on when they had nothing else to do—when there is no material to work with, or little, and a little material shows up around 6 o'clock, and then only enough for one gang to work, and the rest of them could simply stand around the fires to get warm as well as they could, and they were supposed to stay there until 12 o'clock; and some of the gang started in and worked until 8.30 and 10.30, and one gang stayed there until 12 o'clock, because they could not stand the zero weather.

Senator JONES. When did that occur?

Mr. VANDERBURGH. That occurred January 12. That was told me last Saturday, at the time office, while I was standing in line with a lot of the others for two hours to wait for the money for the week before, which should be paid to the men on the job, as was done at Camp Upton, after the men struck for it. That is one of the things that does more to discourage men than anything going—making them stand in line to receive the money, out in the rain.

Another case that is similar to that, which is mentioned in my paper, sending about 60 men, three gangs composed of 20 each, out, I believe the same night—but on that I am not positive—sending them out on a zero night to build a little guardhouse 20 by 30, and no lumber coming there until 3.30 in the morning, and then only room for 10 men to work.

Senator JONES. Do you know about that yourself?

Mr. VANDERBURGH. I know one of the men, who was foreman on the job, who was working for me afterwards; and the records will show these names, understand. There is no question but you would simply have to have them looked up before any action is taken, but it is easy to look them up.

Senator JONES. Will you not give us anything you know?

Senator RANSDELL (interposing). Kindly give us the records. You y the records will show them.

Mr. VANDERBURGH. I mean the records in the time office will show at, when these men went out on that job.

Senator RANSDELL. Will it show what particular work they were ing?

Mr. VANDERBURGH. Certainly, it will, because there are foremen's ne sheets which go in. I thought I had one, but I do not seem have one with me. There are time slips that go in, that give the me of the job and the number of hours spent on that job each day.

Senator RANSDELL. When you begin the job and when you quit?

Mr. VANDERBURGH. When we begin and when we quit. That par- ular guardhouse cost several hundred dollars for labor before there is a stick on the job, just by those men standing there freezing at uble time.

Senator JONES. How many guardhouses are there?

Mr. VANDERBURGH. This is one particular one. The others are rge ones. This is a small bit of a building.

Senator NELSON. What do they want a guardhouse there for?

Mr. VANDERBURGH. This was one on the way to the trolley, and its umber was 497.

Senator NELSON. What do they have guardhouses there for?

Mr. VANDERBURGH. You might better ask why do they have a uardhouse. They have men there to rob the men, because those uards are the ones who do the robbing, according to the men.

Senator NELSON. There are houses for the guards to stay in?

Mr. VANDERBURGH. For the guards to stay in.

Senator NELSON. In the Army we used to think a guardhouse was place to put soldiers in who had broken the rules.

Mr. VANDERBURGH. They have large barracks for the guards, which ey call the guardhouses, and this is a two-story building that some f the guards stay in on the way to the trolley cars.

Senator RANSDELL. How long did you work there, Mr. Vander- urgh?

Mr. VANDERBURGH. From December 18, when I came there, as I aid.

Senator RANSDELL. Until what time?

Mr. VANDERBURGH. I just came from there. No one worked—the ob was supposed to be shut down during last week, so that the last ork I did was the Saturday before, but I stayed there, expecting to et on.

Senator RANSDELL. You were there two weeks?

Mr. VANDERBURGH. About two weeks.

Senator RANSDELL. From January 18?

Mr. VANDERBURGH. No; December 18. Did I say January 18? thought I said December 18. I mean December 18, anyway; I did ot mean January. And I want to get my money.

Senator NELSON. Were you a contractor?

Mr. VANDERBURGH. Not there. There I was foreman carpenter. Ly business is architect and builder and general contractor; there I as just foreman carpenter.

Senator NELSON. What does that button indicate that you have on?

Mr. VANDERBURGH. The button indicates foreman.

Senator RANSDELL. That is the button used at that particular——

Mr. VANDERBURGH (interposing). Division. They have different colored buttons for different divisions.

Senator NELSON. What wages were you getting as a foreman?

Mr. VANDERBURGH. I was getting as foreman 70 cents an hour, and some of the foremen got $50 a week.

Senator NELSON. What were they paying the men under you?

Mr. VANDERBURGH. Sixty cents an hour; and as far as the idea of the workmen getting a good deal of money is concerned, I want to say that this last week—the last week I worked—$32.95 was the amount I earned at 70 cents an hour.

Senator NELSON. $32 for the week?

Mr. VANDERBURGH. Yes; some of them get $50 a week, and others prefer the 70 cents an hour, because sometimes they do get more than $50 a week. One week I got more than that. But the pay for foremen carpenters is nothing attractive. I mean to say, nothing high about it.

Senator NELSON. Sixty cents an hour?

Mr. VANDERBURGH. That is, mechanics; 70 cents is what the foremen get.

Senator NELSON. I mean the carpenters.

Mr. VANDERBURGH. Sixty cents an hour.

Senator NELSON. For eight hours?

Mr. VANDERBURGH. Yes.

Senator NELSON. That is $4.80 a day.

Senator RANSDELL. And the carpenter has to pay his board out of that?

Mr. VANDERBURGH. Yes, they have to pay their board out of that, and the board that they give them there, it has been described here pretty well.

Senator RANSDELL. Described where, in your paper?

Mr. VANDERBURGH. A couple of things I did say about it in there, but what I did not say is, one of the most outrageous there is, the uncleanliness as well as the poor quality of the food. When I say "uncleanliness" I do not mean they do not wash the tables, for they do. But they do not wash, for instance, the coffee pot, the big urn that the coffee is cooked in. I am told that by the kitchen men, and I believe it to be the fact. I have been a cook. When I was at Mount Hermon boarding school years ago, I worked in the kitchen and I learned to cook. And one of the things I had to do was washing those big coffee pots, and I know how they should be washed and how easy it is, and I know also the result of making coffee and tea in ones which are not washed.

Senator RANSDELL. Does anybody have personal interest in giving filthy food to the men?

Mr. VANDERBURGH. No; that is merely slovenliness. I really believe that the coffee, as these kitchen men told me, is good enough and would be all right if those pots were washed. So far as the tea is concerned, I do not know, but I do know I took two teaspoonsful and it made me sick during the night, and I believe it is because of the fact of the pot not being washed. They told me the coffee is never all taken out of that pot, and the sides are always black where they should show the tinning inside of the pot. The question of the food is a thing, I think, which is one of the most important—the food and the housing—in getting men for the shipyards. They talk

about this conscription in order to get 250,000 men and all, but I would suggest that if they gave the men proper food and enough of it that the mechanics will tell their friends and they will get all the men they want. There is no doubt in my mind about that, because the way the men are fed to-day at Hog Island and paying 10 or 20 cents a meal—they tell me the Government is paying 20 cents more for it, but I can not understand it, and they can not get the shipbuilders that way.

Senator NELSON. Do they only give the men one meal a day?

Mr. VANDERBURGH. They give them three meals a day.

Senator NELSON. I do not mean those that stay there, but those that go home in the evening.

Mr. VANDERBURGH. Those that go home in the evening they give them their lunch. When I told them I eat at the mess hall, they looked at me as though I was the dirt under their feet.

Senator NELSON. What proportion of the men eat at the mess hall?

Mr. VANDERBURGH. I can not say exactly, but there are thousands that eat there, and I have stood in the line for one hour at the mess hall, and they tell me—so many have told me that I believe it—that a man actually dropped down and died from the result of the exposure while standing in the line at the mess hall.

Senator RANSDELL. Why do they have to stand in line?

Mr. VANDERBURGH. Because of the poor management. There is one thing, they have a little ticket which is different from the rest of the tickets, for a man who just comes there, and this requires scrutinizing, and it takes time in punching, and one thing and another, and I said long ago to one of the head men that they ought to have those tickets examined to one side, forming a line for those new men, and not holding up the line all the time. But instead of that they examine those tickets, and they hold up the line continuously, and I do not think it is entirely the fault of the kitchen help.

Senator RANSDELL. Do you belong to the union?

Mr. VANDERBURGH. I do. I belong to the union just because of the fact that I work for others a good deal, although I have been in business for myself right along.

Senator RANSDELL. Do you want to bring in any other specific facts before the committee?

Mr. VANDERBURGH. That question of standing in line, I think is one of the principal ones, and the fact they do not attract good mechanics now because of that and the housing conditions.

On the question of the barracks. They put up show barracks, with lockers in them for each man, and when any visitors come to Hog Island they show them those barracks, while the majority of the barracks have no lockers, and the men lose their things right along, and that is very discouraging to the men. And another thing, I could say, in addition to question of barracks, is, you could ask the men about it, and that is whether they are satisfied or not. After you have driven about all the first-class American mechanics, except those who live near by, you can do pretty near what you please with the rest of them, because they are men who are not mechanics, the most of them. The good mechanics have gone away; they would not put up with it. But the ones there to-day are most of them men who are just picking up the business, because they are getting more money than they got before.

Senator NELSON. Is not that the case with all of them, that they get bigger pay than they had before?

Mr. VANDERBURGH. Not all of them. The wages in New York are $5.60 and in Hog Island $4.80.

Senator NELSON. I mean around Philadelphia?

Mr. VANDERBURGH. I do not know about Philadelphia.

Senator RANSDELL. How did your former wages compare with the wages paid there?

Mr. VANDERBURGH. I got $75 a week in Brooklyn.

Senator NELSON. Why did you leave Brooklyn and come there?

Mr. VANDERBURGH. It was done because there was not anything to do in Brooklyn any more. It is not a question of having the work at other places. The thing is that when a man goes away from his home to work at one of these Government jobs and puts up with the living conditions, he ought to get more money than he is getting at home. Do you not think so?

Senator NELSON. Certainly.

Mr. VANDERBURGH. I think it is patriotic to do it, and as far as patriotism with the men is concerned I want to say that I have had no trouble with the men working, providing you try to instill patriotism in them and talk to them and lead them. I think if you would show the men you want to get the work done and that every nail they drive is hitting the Kaiser you generally get the job done.

As far as taking foremen from the ranks is concerned, I want to say my experience at Camp Upton, where I made the record of putting up one of those two-story barracks in one day, that I picked six foremen from the ranks, and I got the job done in a day, which was three and a half hours less than the next quickest man who did it, showing that it is a fact that the foremen can be picked from the men, and there is no necessity for having a lot of little men over big men, as they have at Hog Island. There are men in big positions at Hog Island who do not know beans about the work.

Senator NELSON. Do you know one instance?

Mr. VANDERBURGH. For instance, this man Parker, who was general foreman over me. He would come around and look for reports, and he did not care that much [illustrating] about the work, whether it went on right or not.

Senator NELSON. Where was he from?

Mr. VANDERBURGH. I do not know where he was from. He simply came early on the job and was boosted up. I do not know whether it was that or whether he had a pull. There are a lot of them who came afterwards, big men, builders of experience, who had done things, who have little inferior jobs there.

Senator NELSON. How many days did you work there?

Mr. VANDERBURGH. How many days did I work there?

Senator NELSON. Yes.

Mr. VANDERBURGH. I do not know the number of days, but I came there on December 18 and went home for Christmas, and came back in a few days after Christmas, and worked until a week ago last Saturday.

Senator NELSON. And then how came you to quit; did they discharge you?

Mr. VANDERBURGH. No, sir; I would not have that, but if they did.

ator RANSDELL. Will you tell me now why this work is being cted so inefficiently? What is the reason for that, in your ıent?

VANDERBURGH. I can not see any other reason but the desire to ıe most money possible out of it.

ator RANSDELL. In other words, the Government is paying for it not?

VANDERBURGH. Yes.

ıator RANSDELL. Who is going to get the money out of it, if the nment is paying for it?

VANDERBURGH. It is the bigger commissions, when they have ıing so incorporated.

ıator NELSON. The subcontractors get the money?

VANDERBURGH. The subcontractors get the money?

ıator NELSON. Yes. And the men who work under them, the vho are loafing, what proportion of them did you see while you been there who were loafing and not doing any work?

VANDERBURGH. So far as that is concerned, the men are gen- willing.

ıator NELSON. That is not the question I am asking you. Give straight answer. What proportion of the men in the yard been working and what proportion have not while you were in ?

VANDERBURGH. Part of the time I have seen gangs of laborers only a quarter of them were working and the rest standing d, and of carpenters I have seen cases where there were not more than half of them working. But that is not true to-day. this investigation started the men are moving up a little bit, ou will not find them loafing there to-day.

ıator NELSON. They are reducing the force some?

VANDERBURGH. Yes; they laid off everyone a week ago Satur- and called it a shut-down, and, of course, a great many of the vent home.

ıator NELSON. They are hiring them over again now after hav- ıid them off?

VANDERBURGH. I do not know as you would call it hiring them again. They simply laid them off for the week and they did ıke away the buttons, so they could simply come back and start rk again, like taking a few days off.

ally stayed at Hog Island as long as I did to get this evidence. ıld have quit Hog Island very soon after I came there if I had en what I thought was the most outrageous treatment of Uncle I ever saw, and I stayed and put up with the conditions to get on some of these things, and I have gotten a line on some of

question of getting a definite case, such as I have just stated in d to sending those men out without any lumber to work with, o on, if you want a definite case, that refers to just my gang, I tate one: For instance, on Monday, two weeks ago, I think it this was the Monday it snowed and most of the men had to go —and because I was an hour man, my general foreman, Mr. r, made me go home, although I asked him what I was to do llowing day when the men came, and I wanted to look for my

job, and I had finished the job I started before, which we had worked overtime until 6 o'clock to finish it.

Senator NELSON. What was the job?

Mr. VANDERBURGH. The job I had been doing was finishing the transformer houses, and I had finished one the previous Saturday, and I did not know the work my gang was to do the next day, and instead of letting me stay on alone on Monday, when the men were not there and having me look up the other job and get the lumber to it, or make an effort to, he said, "We will see about it to-morrow," and I could not get him to let me stay; I had to go home.

Senator NELSON. And that is the reason you did not stay at Hog Island; that is your grievance?

Mr. VANDERBURGH. No; that is not my grievance. I was glad to get off. It was a matter of from 1 o'clock on. You would not consider staying on two or three hours a grievance. I have not any grievance against a single man, excepting doing something against Uncle Sam. I just want to state here: This man Parker has been nice to me.

Senator NELSON. What about this case you were going to tell us about?

Mr. VANDERBURGH. This case I was going to tell you about was just this: When we came to work the next morning, he said it would be all right, he would attend to it, and the next morning he was not there.

Senator NELSON. Parker was not there?

Mr. VANDERBURGH. Parker was not there. He had told me to go to No. 11 transformer house, where I would find the lumber, and it would be all right. I came on in the morning and there was no such place to be found, no place where there was material or anything. I met him at half past 9 in the morning, and he did not know any more about it than I did. He had the number wrong or something else. He told me to go to No. 1 transformer house and wait, and he would come up and tell me what to do. He came up there at half past 11 and told me to go some place to meet a man who would tell me what to do. I went and found this man. There was no material there, but by hustling around I got some material to the job at half past 2 in the afternoon.

Senator NELSON. Where was the material?

Mr. VANDERBURGH. The material had to be picked up around the yard as best I could. The requisition for the material had not gone in. There had been nothing done at all to get ready for that job, excepting telling me to take the men there. In other words, that is simply a typical case of the way things are done at Hog Island—simply put the men on the job, whether there is any material there or not.

Senator NELSON. Will you tell us whether the men wanted to work or not?

Mr. VANDERBURGH. The men wanted to work. You could not blame the men. My men, in order to get started on the job, after I found out where the job was and while I was getting the material, some of my own men went and swiped some stuff from the other job to get the sills started up, showing they were anxious to work. That is the way things have gone on there.

One other case in regard to, I think, $10,000 waste was that case of the No. 1 mess hall. These men told me——

Senator NELSON (interposing). What men?

Mr. VANDERBURGH. Some carpenters who worked there. They told me that along about the 1st of December or thereabouts that they were set to work, working day and night, a hurry-up job, to rip the partitions out of that building and build tables in it, and that they worked 80 men for a week on that job getting this ready and building fancy tables—building them and sandpapering them.

Senator NELSON. Was there room for 80 men to work?

Mr. VANDERBURGH. I was not there; but they piled men so thick on No. 1 compressor job, there were so many men there the day I had my men waiting to find out about this other job, that they refused to go in—men were in there standing around doing nothing, two-thirds of them, and you could not do anything. The men said they were not going in there: "What is the use?" So I sent them back to the job they were on before and told them if they could find anything to do to do it. When they got the tables done, then the orders came to rip them all out and destroy them.

Senator NELSON. The tables?

Mr. VANDERBURGH. Yes.

Senator NELSON. What for?

Mr. VANDERBURGH. What for? That is what I would like to know, and why they should rush day and night, and this man who told me said he himself worked both day and night, continuously, because he was able to sleep during the work.

Senator NELSON. They started in first to knock out the partitions inside and then put in the tables?

Mr. VANDERBURGH. Yes.

Senator NELSON. And then after all that was done they destroyed tables?

Mr. VANDERBURGH. That is it exactly.

Senator NELSON. What did they do after they destroyed the tables?

Mr. VANDERBURGH. I did not go into that further.

Senator RANSDELL. Did you see that yourself?

Mr. VANDERBURGH. No; but this man told me, volunteered the information, when I was talking about this. The men themselves are patriotic.

Senator RANSDELL. That is hearsay on that point.

Mr. VANDERBURGH. I know, but it can be backed up by the records. That is the only reason I mentioned it. If the records would not show these things I would not mention them at all.

Senator RANSDELL. The time for adjourning the committee is about here. Have you any other point you can finish on?

Mr. VANDERBURGH. I think I have given it all. I would simply like to say that before a conscription of mechanics takes place I hope that the Government will try the method of improving the housing conditions and the living conditions and have that fairly looked into, and give the men what they ought to have and make it attractive for them to work and live at the shipyards, and then you will find plenty of good mechanics ready to work.

Thank you very much.

Senator RANSDELL. We are very much obliged to you, Mr. Vanderburgh.

(Thereupon, at 5 o'clock p. m., the committee adjourned to meet at 2 o'clock p. m. Friday, February 15, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

FRIDAY, FEBRUARY 15, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., the committee room, Capitol, Hon. Duncan U. Fletcher presiding.
Present: Senators Fletcher (chairman), Ransdell, Vardaman, ields, Reed, Nelson, Jones, Harding, Calder, and Johnson.
The CHAIRMAN. The committee is now ready to hear Mr. Sanders.
Senator JONES. Mr. Chairman, before we do that, there is a mat- r, which may be rather unimportant but to which I wish to call tention and which I wish to put in the record:
When Mr. Baldwin was testifying before the committee he re- rred several times to Stone & Webster, and what they had done cantonment work, and he especially emphasized the fact, as he ated it, that the cantonment that they had built in San Antonio, ex., cost less than any other cantonment in the country.
The fact is that, for the number of men to be accommodated, that ntonment did not cost less than any other cantonment in the coun- y; that the per capita cost of that cantonment was $162.43; while e cantonment at Louisville, Ky., cost per capita $160.25; and the ntonment at American Lake, in the State of Washington, cost 58.38 per capita, or the lowest cost of any cantonment in the nited States.
Senator RANSDELL. From what are you quoting, Senator Jones?
Senator JONES. I am quoting from a statement submitted by Col. ittell, printed in the hearings before the subcommittee of the House ommittee on Appropriations.
Senator RANSDELL. Will you give the page of the record, so that e can refer to it?
Senator JONES. It is on page 470. And I would like to add to that tement that the American Lake cantonment was built by local ntractors, the Hurley & Mason Co., of Tacoma, Wash.
The CHAIRMAN. I have a letter from Mr. Piez, vice president and neral manager of the Emergency Fleet Corporation, in answer to a mber of inquiries which have been made by individual members the committee from time to time. Mr. Piez transmits with his ter various memoranda, as well as a contract, giving the informa- sired.
The letter, with the accompanying data, will be inserted in the ord at this point.

(The letter, memoranda, and contract referred to are here prin in full, as follows:)

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, February 5, 191

Hon. DUNCAN U. FLETCHER,
United States Senate, Washington, D. C.

DEAR SIR: Last week your committee made the following requests of Stern, of our legal division:

1. Senator Nelson requested a copy of the option contract between the Sl Shipyards and the Clinchfield Navigation Co. This was sent to you on Ja ary 30, with a letter from Mr. Stern.

2. Senator Calder asked for certain information in connection with the sl commandeered from the Sun Shipbuilding Co. This was sent to you February 1.

3. Senator Jones asked for a statement of the contracts that were in situation of the Sloan contract and had no restrictions upon the first] ments. This information is contained in Schedule A, attached to this letter

4. Senator Ransdell asked how the price of $490,000, the contract price ur the Sloan contract, compared with the current price of steamers. This infor tion is contained in Schedule B.

5. Senator Jones requested the names of the stockholders of the Clinch Navigation Co. Such information as we have on this subject is containe Schedule C.

6. Senator Sherman asked for the names of the stockholders and cer other people connected with the United States Steel Shipbuilding Corpora at San Diego. Such information as we have in this connection is containe Schedule D. A copy of the contract is attached.

7. Senator Johnson asked for certain information in connection with American International Corporation, Merchant Shipbuilding Corporation, Submarine Boat Corporation. Such information as we have accessible at moment is contained in Schedule E.

If there is any further information that we can give upon any of these po will you kindly communicate with me.

Very truly, yours,

CHARLES PIEZ,
Vice President and General Manage

SCHEDULE A.

INFORMATION REQUESTED BY SENATOR JONES.

Senator Jones desires a list of the contracts which, with respect to the or advance payments, were in a similar situation to the contract with the S Shipyards.

Each of the following contracts contains a provision for the paymen moneys in thirty (some of them in thirty and sixty) days after the execu of the contract. Some of the contracts enumerated contain a provision these advance payments will not be made except upon a showing that m has been paid out or that the contractor has committed himself for labor materials to the extent of the advance payment. None of the follo contracts contains any restrictions upon the use of the moneys so obta For a general statement as to the provisions regarding the advance payn in the lump-sum contracts we refer to the table printed in the record of hearings before your committee at page 238.

Contract No. 1, April 29, 1917, Merrill-Stevens Co., 12 composite steame

Contract No. 2, May 1, 1917, Merrill-Stevens Co., 4 steel ships.

Contract No. 3, May 14, 1917, G. M. Standifer Construction Corporatio wood steamers.

Contract No. 4, May 13, 1917, Los Angeles Shipbuilding & Dry Dock C steel ships.

Contract No. 6, May 18, 1917, Sloan Shipyard Corporation, 16 wo steamers.

Contract No. 7, May 19, 1917, Gray's Harbor Mortorship Corporatio wooden hulls.

Contract No. 8, May 21, 1917, Coast Shipbuilding Co., 4 wooden hulls.
Contract No. 9, May 24, 1917, Terry & Brittain, 20 composite steamers.
Contract No. 10, May 28, 1917, Skinner & Eddy Corporation, 6 steel steamers.
Contract No. 13, June 5, 1917, Seattle Construction & Dry Dock Co., 10 steel ships.
Contract No. 15, June 15, 1917, Groton Iron Works, 12 wooden hulls.
Contract No. 16, June 15, 1917, Ship Construction & Trading Co., 2 wooden hulls.
Contract No. 22, June 23, 1917, Newcomb Lifeboat Co., 4 wooden steamers.

SCHEDULE B.

INFORMATION REQUESTED BY SENATOR RANSDELL.

Senator Ransdell wanted to know (1) how it was that the Sloan vessels were offered via Mr. Ferris at $140 per dead-weight ton, or $448,000 per vessel, and contracted for at $490,000, and (2) how the price per vessel of $490,000, contained in the Sloan Shipyards contract, compared with that in other contracts.

1. The price per dead-weight ton was not raised. The Sloan Shipyards Corporation contracted to furnish sixteen (16) wooden steamers, Ferris type, which is 3,500 dead-weight tons carrying capacity. The contract price of $490,000 is at the rate of $140 per dead-weight ton. The vessels offered (see letter from Mr. Barnett to Mr. Ferris, dated April 23, 1917, and printed in the record, referred to in the testimony of Mr. Stern) were 3,200 dead-weight tons, and these were offered at $140 per dead-weight ton. The difference in dead-weight carrying capacity of 300 tons represents exactly the difference in the offered price and the price contracted for.

2. The following is a schedule of the Ferris type wooden steamers showing their contract price per dead-weight ton:

Date.	Contract No.	Company.	Number of ship.	Total tons.	Total cost.	Contract price per dead-weight ton.
May 14, 1917	3	G. N. Standifer Corporation	10	35,000	$5,000,000	$142.86
May 18, 1917	6	Sloan Shipyard Corporation	16	56,000	7,840,000	140.00
June 16, 1917	23	Traylor Shipbuilding Corporation	10	35,000	5,000,000	142.86
July 14, 1917	40	Grant-Smith-Porter-Guthrie	8	28,000	4,000,000	142.85
Nov. 28, 1917	143	Meacham & Babcock Shipbuilding Co.	4	14,000	2,220,000	158.57
Feb. 1, 1918	176	G. N. Standifer Corporation	6	27,000	4,320,000	160.00

Recent contracts increased by reason of added labor costs.

SCHEDULE C.

INFORMATION REQUESTED BY SENATOR JONES.

Senator Jones requested information as to the stockholders of the Clinchfield Navigation Co. (Inc.). We have no information immediately accessible as to the stockholders.

Moody's Manual of 1917 gives the officers as: Charles E. Bockus, president; W. M. Barnett, vice president; and J. L. Stewart, secretary and treasurer. The directors are given as Bockus, Barnett, E. L. Marston, R. C. Ream, W. B. Donham, I. T. Mann, and W. M. Ritter. The office of the company is at 24 Broad Street.

The common stock of the Clinchfield Navigation Co. (Inc.) is owned by the Clinchfield Coal Corporation. The Clinchfield Coal Corporation likewise owns the entire capital stock of the Dawson Coal & Coke Co., Clinchfield Coal Co., Cranes Nest Coal & Coke Co., Clinchfield Fuel Co., and the Swannanoa Corporation.

The property comprises 300,000 acres of coal lands in Russell, Dickinson, Wise, Scott, and Buchanan Counties, Va. The company has several mining plants.

The directors of the Clinchfield Coal Corporation are stated to be as follows: R. C. Ream, E. L. Marston, E. D. Adams, H. E. Cooper, Benjamin Guiness, C. M. Barnett, J. D. Crowell (New York), W. B Donham (Boston), and C. E. Bockus (Dante, Va.).

The general office of the coal corporation is at Dante, Va.

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, January 31, 1918.

SCHEDULE D.

FOR THE INFORMATION OF SENATOR SHERMAN—PERSONNEL OF THE UNITED STATE STEEL SHIPBUILDING CORPORATION.

1. A proposal made by the United States Steel Shipbuilding Corporation t the Fleet Corporation, dated November 22, 1917, contains the following state ment: "We attach hereto, as Exhibit No. 3, a schedule of the executive organi zation of our company." A copy of this exhibit is attached.

2. The Mr. Sullivan connected with the organization is, as appears from card contained in the papers, Mr. P. W. Sullivan, of the law firm of Mathias Sullivan, 111 West Washington Street, Chicago, Ill.

3. A letter from this concern, dated October 12, 1917, to Mr. Pillsbury, con tains the following statement: "Arrangements have been made whereby Adam F. Weckler, 401 City Hall Building, Chicago, Ill., is to be the general manager Mr. Weckler is an able architect and engineer and a shipbuilder."

EXHIBIT NO. 3 OF PROPOSAL OF UNITED STATES STEEL SHIPBUILDING CORPORATIO OF SAN DIEGO, CAL.

NOVEMBER 22, 1917.

Benjamin F. Graham, president (capitalist), Los Angeles, Cal.; R. T. Elliot vice president (shipbuilder); Adam J. Weckler, treasurer; Ellis Geigler, secr tary; Adam F. Weckler, general manager.

Adam F. Weckler: Graduate Wisconsin University, 1895; connected in shi building and wooden boat building for 18 years; with United States Gover ment 3 years; Hongkong & Wampaugh Dock Co. for 2 years; surveying, wrec ing, and diving 2 years; engaged in shipbuilding in Chicago for 6 years, la 2 years in consulting engineering and designing; engineer in charge of m nicipal pier construction, breakwater, and dock, Chicago; engineer in charge river and harbor work of Chicago; for last four months engineer in charge work in connection with the United States Steel Shipbuilding Corporation.

Francis H. Early: Naval architect; Chicago public schools, 1890–1898; Nort western University Academy, four years; Armour Institute, two years; Nort western University, one year; Massachusetts Institute of Technology, 1905– (see their catalogue); American Shipbuilding Co., 1907–1909; Weckler Boa Co., 1910–1913; Chicago, Burlington & Quincy Railroad, hydraulic enginee 1914; assistant chief engineer Underwriters' Laborators, 1915.

H. B. Vehstedt: Chicago public schools, 1891–1899; Chicago public high scho 1899–1902 (special tutorage in naval architecture); worked in shops of A. Cuthbert & Co., vessel builders, 1902 and 1903; foreman Western Launch Engine Co., 1904–1906; superintendent Outing Boat Co., 1907; assistant superi tendent Pierce Motor Co., 1908–1911; superintendent Weckler Boat Co., 1911 1916; naval architect, city of Chicago, 1916; harbor engineer, city of Chicag 1917.

Roy S. Younglove: Graduate Stevens Institute of Technology, 1901; 2 yea American Radiator Co.; 1 year American Lubric. Co.; 12 years Illinois Ste Co., physical laboratory works, plate mill, and rail mill, and 7 years in stea engineering department, assistant to mechanical engineer.

A. S. Van Rosen: Chief draftsman; graduate of naval architecture and ma rine engineering; Armstrong College of Science, Durtana, England; has bee employed as chief draftsman New York Shipbuilding Co., Pacific Coast Stea ship Co., Northwestern Engineering Works, United Engineering Works, Unio Iron Works, Union Oil Co.

To carry on the work required under the proposed contract, this corporatio has now under employment and available 442 men and many other applicatio on file.

CONTRACT NO. 171 S. C.—HULL NOS. 1091–1094, INCLUSIVE.

Contract made this 19th day of January, 1918, between U. S. Steel Shipbuil ing Corporation, a corporation organized under the laws of the State of Cal fornia, party of the first part (herein called the Contractor) and the Unite

States Shipping Board Emergency Fleet Corporation, a corporation organized under the laws of the District of Columbia (herein called the Owner), representing the United States of America, party of the second part.

For a valuable consideration, the receipt of which is hereby acknowledged by both parties, and in consideration of the mutual promises of the parties it is agreed as follows:

I.

SHIPYARD.

1. The Contractor agrees to construct, equip, and maintain, upon a suitable site, a complete shipbuilding plant, including office buildings, shops, building slips, plant equipment, and appurtenances, including arrangements for adequate fire protection, adequate to assure the construction, completion, and delivery of the vessels under the terms and at the times herein provided, said plant to be substantially completed in one hundred fifty (150) days from date of execution of this contract.

The Contractor is the assignee from Benjamin F. Graham of a lease made and entered into on October 8, 1917, by and between the City of San Diego, a municipal corporation in the County of San Diego, State of California, for the period of fifty (50) years from and after the first day of January, 1918, of a tract of approximately fifty (50) acres lying on San Diego Bay, said lease being recorded in Book of Leases No. 13, page 278.

and said assignment, dated November 21, 1917, being recorded on November 24, 1917, in Book of Assignments of Mortgages and Leases No. 20, page 346, in the Office of

WORK.

2. The Contractor hereby agrees to construct at its own risk and expense, in accordance with the Contractor's drawings and specifications (all drawings and specifications, before binding on the Owner, must bear the acceptance of and approval by the Owner, or its duly authorized representative), hereto attached and made a part of this contract, under the rules and regulations of the American Bureau of Shipping, and/or Lloyds four steel cargo-carrying vessels of the Robert Dollar type, of 8,800 tons dead-weight carrying capacity each, and 10½ knots estimated speed at deep-load draft.

DELIVERIES.

The Contractor agrees to deliver said vessels complete with propelling machinery, auxiliaries, and equipment, with full military requirements, according to said drawings and specifications, to the Owner, afloat at the works of the Contractor at San Diego, California, as follows:

One vessel twelve (12) months from the date of the execution of this contract and one vessel every six weeks thereafter until the final completion of this contract.

3. The Contractor further agrees to furnish, before any payment shall be due hereunder, a surety bond or surety bonds (in form satisfactory to the Owner) in the sum of Six Hundred Thousand Dollars ($600,000) of a company or companies, or of a person or persons, each and all of which companies or persons must be acceptable to the Owner, such bond or bonds to be conditional upon a full and complete performance by the Contractor of each and all of the undertakings in the within contract.

II.

PAYMENT.

1. In consideration of the performance of this agreement by the Contractor, the Owner agrees to pay therefor a lump-sum purchase price of One Million Four Hundred Ninety-six Thousand Dollars ($1,496,000) for each of such completed vessels. Such purchase price shall be paid in the following manner:

STEEL FURNISHED.

The Owner agrees to cause to be furnished f. o. b. the mill to the Contractor certain steel material, which shall be ordered by the Contractor, at the price (freight to Contractor's yard to be paid by the Contractor) and in amounts

and at the times substantially as shown in Schedule "B" hereto attache which is made a part hereof. Such steel shall be ordered by the Contracto for the Owner's account, and payment therefor at the price shown in Schedul "B" shall be made by the Owner direct to the concern furnishing such stee All payments so made shall be deemed payments on account of the purchas price above stated. For the purpose of computing the amounts to be paid b the Owner direct to the Contractor, the cost of such steel is figured approx mately at Two Hundred Thousand Dollars ($200,000) for each vessel (but th estimated cost of steel shall not be deducted from payment (a), but shall, afte said payment has been made, be deducted from the other payments as pr vided for in paragraph 2 hereof). The balance of the purchase price is to b paid direct to the Contractor, as follows:

(*a*) Ten per cent (10%) of the contract price of all said steamers thirty (30 days after signing this contract.

(*b*) Ten per cent (10%) of the contract price of each vessel when the kee thereof is laid, or its equivalent in work done.

(*c*) Five per cent (5%) of the contract price of each vessel when 50% of the floors are in place, or its equivalent in work done.

(*d*) Five per cent (5%) of the contract price of each vessel when 50% of th tank top is bolted in place, or its equivalent in work done.

(*e*) Five per cent (5%) of the contract price of each vessel when one-hal the frames thereof are in place, or its equivalent in work done.

(*f*) Five per cent (5%) of the contract price of each vessel when all the frames thereof are in place, and stem and stern posts are up, or its equivalent in work done.

(*g*) Ten per cent (10%) of the contract price of each vessel when one-half the plating is bolted in place, or its equivalent in work done.

(*h*) Ten per cent (10%) of the contract price of each vessel when bulkheads and decks are in place, or its equivalent in work done.

(*i*) Ten per cent (10%) of the contract price of each vessel when said vessel is fully plated, and the decks and the outside of the vessels are entirely caulked, or its equivalent in work done.

(*j*) Ten per cent (10%) of the contract price of each vessel when said vessel is successfully launched, or its equivalent in work done.

(*k*) Ten per cent (10%) of the contract price of each vessel when steel houses are completed and machinery, boilers, auxiliaries, and equipment are installed, or its equivalent in work done.

(*l*) The balance of the contract price of each vessel after completion an steam trial and on delivery to and acceptance by the Owner of such complete vessel.

2. In computing the percentage thus to be paid of the purchase price of eac vessel under subdivision (*b*) to (*k*), inclusive, the purchase price shall b deemed to be the aforesaid lump-sum purchase price minus the aforesaid est mated cost of steel to be supplied by the Owner as above stated. In computin the balance due under subdivision (*l*) the actual and not the estimated cost o steel shall be used.

3. "Work done" as used in the preceding paragraph shall mean and re present the actual value of material delivered at the works of the Contracto inspected and passed by the Owner, or the duly authorized representative of th Owner, and the actual value of all labor expended on the vessel or vessel together with a proper proportion of the operating and overhead expenses i curred only on account of the vessels herein contracted for; and cash payment if any, for hull material fabricated at the works of a subcontractor and/or f propelling machinery, boilers and auxiliaries all as approved by the duly a thorized representative of the Owner.

4. The Contractor agrees to have available in cash out of its own funds, e clusive of what it shall receive from the Owner hereunder, amounts from tin to time as the progress of the work shall require, and/or as the Owner ma require, aggregating the total sum of Two hundred and Ninety-Nine Thousan Two Hundred Dollars ($299,200), or such additional amounts as the Owner ma from time to time require the Contractor to have available for the purpo of constructing ways, plant, and plant equipment, and to expend the said su or such part thereof as may be necessary, in the opinion of the Owner, fro time to time, in the work hereunder. The Contractor will expend a sum not less than Two Hundred and Ninety-Nine Thousand Two Hundred Dolla ($299,200), upon construction of its ways, plant, and plant equipment, or suc part of said sum as may, in the opinion of the Owner, be considered necessar

The payments described in subdivision (*a*) of Section 1, Article II hereof, shall be deposited in the name of the Owner, with such depositary or depositaries as may be designated by the Contractor from time to time and approved by the Owner. The money so deposited shall be withdrawn and used only in payment for labor employed and/or material, etc., used exclusively in the construction of the vessels, except that the sum of Two Hundred and Ninety-Nine Thousand Two Hundred Dollars ($299,200) of said payment described in said subdivision (*a*) may be used by the Contractor for additions to ways, plant, and plant equipment, and for propelling and auxiliary machinery and such proper proportion of overhead or other items of expense as the Owner may approve. All such withdrawals shall be made only upon checks or drafts drawn by the Contractor and countersigned by the duly authorized representative of the Owner. Such checks or drafts will be countersigned upon receipt of and in accordance with vouchers for labor and/or material and evidence of cash payments or commitments for the purposes in this Section above set forth, which have been signed by the Contractor and approved in form and substance by the duly authorized representative of the Owner, or on the basis of such other evidence as the Owner may deem sufficient. The title to such deposit and interest thereon shall be and remain in the Owner until withdrawn as aforesaid. Before any payment shall be made to the Contractor under this contract, the Contractor shall furnish to the Owner such abstracts and/or affidavits and/or other evidence of its (the Contractor's) leasehold or interest, and its power to assign the same, in the property upon which the plant is to be located, and the riparian, wharfage, and other franchises or rights appurtenant thereto as shall be satisfactory to the Owner. In the event that the condition of said leasehold estate or interest of the Contractor is not satisfactory to the Owner and in the event further that the Contractor does not, upon request from the Owner, furnish, at its expense, such guaranties or indemnities against defects herein as the Owner may require, then the Contractor agrees to return his contract to the Owner to be considered at its option canceled. All expenditures made and obligations incurred meanwhile are at the sole risk of the Contractor. In the event of any default of the Contractor under this contract, the Owner, upon notice of such default to the Contractor and to the depositary or depositaries who may have custody of funds held under joint control from time to time under this contract, shall have the right to withdraw such funds or any part thereof upon its (the Owner's) sole order; and the Contractor shall, upon the Owner's request, comply fully with any formalities which may at any time be required in order to satisfy the intent of this understanding.

In consideration of the Owner permitting the Contractor to use Two Hundred and Ninety-Nine Thousand Two Hundred Dollars ($299,200) of said payment (*a*) upon its ways, plant, and equipment provided hereinabove, the Contractor agrees to secure the Owner by creating a trust in form and substance satisfactory to the Owner, which trust shall be evidenced by a declaration of trust which shall constitute a first lien and paramount encumbrance on the Contractor's full interest in the said lease from the City of San Diego and necessary appurtenances to said lease such as riparian, wharfage, and other franchises or rights and all of Contractor's improvements now or hereafter, during the period of said lease, located upon the property or appurtenances covered by such lease, franchises, or other rights. Said trust shall be for the purpose of securing the Owner for the full performance by the Contractor of each and all of its undertakings in the within contract. And the Owner, in the event of default by the Contractor, shall be free to exercise its option and to resort to any of the forms of security to be furnished by the Contractor under this contract, in such order or by such means as the Owner may deem expedient. Such declaration of trust shall be executed before any payment upon ways, plant, or equipment shall be made by the Contractor out of the consideration to be paid by the Owner under this contract. The Contractor shall, as a condition to the creation of the said trust, at its own cost and expense, satisfy the Owner as to the title or rights of the Contractor in said property or said lease in accordance with the manner in this Section hereinabove provided.

PAYMENTS REPRESENTED BY PROGRESS.

5. It is agreed that as to all the installment payments provided for in Section 1 of this Article after the first payment described in subdivision (*a*) of said Section 1, no payments made shall, with the payments theretofore made, exceed the value of the labor and materials already expended up to that time

and/or cash actually paid out for propelling and deck machinery and a proper pro rata part of overhead and operating expenses incurred solely on account of the vessels herein contracted for and such facts are certified to by the Owner's inspector and are accepted as satisfactory by the Owner: *Provided, however*, That for the purpose of determining the time and amount of the payments mentioned in subdivision (*b*) to (*l*), both inclusive, of Section 1, such part of the amount of Two Hundred Ninety-nine Thousand Two Hundred Dollars ($299,200) expended for ways, plant (including real estate), and plant equipment, as provided for in Section 4 of this Article, shall be considered as part of the construction cost of the vessels herein contracted for and that only one-fourth of said sum of Two Hundred Ninety-nine Thousand Two Hundred Dollars ($299,200) (or such part thereof as may have been expended) shall be charged against each of said ships to be built hereunder.

TRIAL.

6. Before final acceptance of each vessel by the Owner, the Contractor shall make, at Contractor's expense, a dock trial of not exceeding six hours, and/or a sea trial at some point convenient to the Contractor's yard, of not exceeding four hours at maximum specified speed and deep-load draft, which shall be to the satisfaction of the Owner. If the vessel is tried at deep-load draft, the Owner will provide cargo. If so desired, the Owner can require all or any of the vessels to be tried at a lesser draft and increased speed corresponding thereto as determined by the Owner.

INSPECTOR'S CERTIFICATE.

7. No inspector's certificate given or payment made under the terms of this contract (except the final payment) shall be conclusive evidence of the performance of this contract, either in whole or in part, and no payment shall be construed to be an acceptance of defective work or improper materials. Every facility shall be afforded by the Contractor to the inspectors appointed by the Owner. It shall be the right and duty of such inspectors, either personally or by deputies, to inspect all materials and workmanship entering into the construction, and to accept such materials and/or workmanship as are in conformity with specifications, and promptly to reject all materials and/or workmanship which do not comply with the specifications; such condemnation, if any, of materials to be made by such inspectors whenever defects are discovered prior to the final acceptance of the vessel by the Owner. Notice of rejection shall be in writing, signed by a designated representative of the Owner.

8. The Owner shall make a deduction at the rate of $170 per ton (or any part thereof) to cover the difference between the actual dead-weight tonnage and the contracted dead-weight tonnage of 8,800 tons, provided that no deduction shall be made for deficiency due to changes, or alterations, in the vessels, or any of them, made pursuant to the Owner's instructions.

The actual tonnage of each vessel shall be determined by her ability to carry a dead-weight of 8,800 tons, including cargo, fuel, stores, water, crew, and effects on a draft with summer Freeboard, as determined by the British Board of Trade rates, as shown by a displacement and dead-weight scale to be furnished by the Contractor, checked and approved by the Owner. The amount of deductions for such tonnage deficiency, when determined, shall be deducted from the balance of the contract price due the Contractor, under subdivision (*l*). The vessel contracted for includes full military extras, but the weight of said military extras and the net effect of changes ordered by the Owner shall be allowed for as if it were dead-weight.

INSPECTORS AND AUDITORS.

9. The Owner's inspectors, auditors, or other duly authorized representatives shall have full and free access to the works of the Contractor and to all work and material and all accounts, records, and original entries, vouchers, and supporting papers of the Contractor. In order that the Owner may keep in touch with the progress and cost of the construction of the vessels the Contractor shall keep its books in such a way as to disclose readily and accurately all information necessary to determine costs, expenses, and charges in connection with the construction of the vessels hereunder.

10. It is agreed that the wages paid by the Contractor shall not exceed those paid by shipyards in the Los Angeles District for similar work. The Owner agrees that in the event that the wage schedule in the Los Angeles District should be increased by its direction or consent over the scale fixed by the Federal Adjustment Wage Board on November 3, 1917, together with the ten per cent (10%) bonus thereon effective as of December 13, 1917, and becoming permanent on February 1, 1918, that such increase will be borne by the Owner.

The Contractor agrees that it will comply at all times with all instructions as to wages, hours, or other conditions of labor issued by the Owner and applying to yards in the Los Angeles District.

If Sunday, holiday, or overtime work be resorted to, it shall be without additional cost to the Owner, unless specifically ordered by the Owner.

III.

ALTERATIONS.

1. The Owner shall have the right, but only by orders in writing, to make such reasonable alterations, omissions, additions, or substitutes not materially affecting the general design of the vessel as the Owner may deem necessary. The Contractor agrees to accede to and carry the same into effect upon proper compensation or allowance being agreed therefor as though such alterations, omissions, additions, or substitutions were originally provided for in this contract. If by reason thereof the cost of the construction hereunder shall be increased, then the sum to be paid by the Owner to the Contractor as herein provided shall be increased to an amount which shall be agreed upon. If the construction shall be rendered less expensive by reason thereof, the sum to be paid shall be decreased by an amount which shall be agreed upon. In case the parties are unable to agree as to the effect of such alterations, omissions, additions, and substitutions, or the price thereof, the dispute shall be determined as provided by Article VII hereof.

DELAY.

2. If the Contractor be delayed or obstructed in the transaction or completion of the work provided for by this contract by the delay, neglect, or default of the Owner, or by reason of alterations or additions by the Owner, or the commandeering by the United States Government of materials on the ground or materials purchased by the Contractor but not delivered, or by reason of strikes, fire, lightning, earthquake, flood, riot, insurrection, or war, or by reason of suspension of deliveries of material or machinery for any of the causes above stated, or by delay or failure of manufacturers to deliver material or which the Owner agrees to cause to be furnished to the Contractor, pursuant to section 1 of Article II hereof, or by reason of instructions given by the Owner under Article XI hereof, beyond the time herein fixed, the time of delivery shall be extended for a period equivalent to the time lost by reason thereof: *Provided*, That no request for extension of the contract time shall be considered unless the Contractor, within ten (10) days from the occurrence of an alleged cause of delay, shall notify the General Manager or the Owner, in writing, of the facts and circumstances in each case and of the extent to which the Contractor claims that the completion of the vessel is thereby delayed: *And provided further*, That the Owner may, without prejudice to the rights of the Contractor, reserve his decision upon any and all claims for extension until the completion of the vessel, the work in the meantime not to be discontinued or delayed on account thereof. In the event that parties shall not agree as to such extension, such extension shall be determined in accordance with Article VII hereof.

IV.

INSURANCE.

The Contractor agrees to insure and keep insured at its own expense for the benefit of the Owner in insurance companies satisfactory to the Owner, or otherwise, said vessels and all materials and supplies for and to be used in construction under this contract against any and all damage by fire and marine risks, lightning, settling of staging, breakage of ways, and risks of launching during such construction and until final completion and delivery to and ac-

ceptance by the Owner; such insurance to be in the usual form and to be able to the owner and the Contractor as their interests may appear, and an amount not less than the amounts of the installments of payment, w from time to time have been made: *Provided*, That the amount of insur required shall not exceed, at any time, the amount available in the insur market, and that before placing the same the Owner has the option of wai any insurance and reducing the contract price by an amount correspondi the cost of said insurance.

V.

FORFEITURE.

The progress of the work must at all times be satisfactory to the Ow Upon any failure or omission of the Contractor to make such satisfac progress (unless caused by circumstances beyond its control) the Owner declare this contract forfeited. In that event the Owner may immedi enter the shipyard and take possession of it and its facilities and of the ve and materials and equipment. The Owner shall thereupon cause to be t and filed with the United States Shipping Board a full and complete state and inventory of all work done or begun on or about the vessels and o materials on hand applicable thereto, the Owner may proceed with the con tion of the vessels in accordance with this contract either at the shipyard its equipment and facilities or elsewhere, by contract or otherwise, and i discretion use for this purpose all suitable materials on hand and include the inventory: *Provided, however*, That if the Contractor can show to satisfaction of the General Manager of the Owner reasonable industry good faith in the prosecution of the work hereunder, and that the delays been caused by circumstances over which it had no control, the Contractor be allowed such opportunity as the General Manager of the Owner may reasonable to complete the work.

VI.

TITLE.

It is agreed that title to all vessels, either completed or under construc in so far as they shall have been inspected and approved by the Owner, sha in the United States of America, and that the title for all material for furtherance of work under this contract, however and by whomsoever contra for or assembled or set up in the shipyard or used in the construction of work under this contract, shall be in the Owner at all times. Nothing conta herein, however, shall be construed as a waiver by the Owner of its righ direct the replacement of unsatisfactory workmanship and of materials.

VII.

DISPUTES.

In case the parties fail to agree as to any matter connected with this tract or any doubt or dispute arises as to the meaning or effect of this cont or of the drawings and specifications which are a part hereof, or as to manner of doing the work provided for hereunder, or as to materials use the time to be allowed or the amounts to be paid or allowed for alterati omissions, additions, or substitutions, or as to any other particular, the ma shall be promptly referred to and determined by the General Manager of Owner, and his decision shall be final and binding upon the parties.

In case after delivery of a completed vessel to the Owner under this cont (but only in that event) the Contractor shall deem that it is aggrieved by decision of the General Manager, as to any disputed matter hereunder of kind, and shall give notice in writing to the Owner to that effect within s days after delivery or after final payment by the Owner such matter shal determined by a board which shall consist of three naval architects or engin or experts to be appointed, one by the Owner, one by the Contractor, and third arbitrator shall be selected by the two arbitrators first chosen, and if can not agree on such third arbitrator then the latter shall be named by Classification Society under which the vessels are being constructed. Such b

shall, without thirty days after submission of such matter to it, make its determination and its findings (made by a majority of the board) shall be conclusive and binding on both parties.

VIII.

TIME OF ESSENCE.

It is agreed by both parties that time is of the essence of this contract. The Contractor will commence and carry through to completion the work under this contract with all possible dispatch, will give precedence in its plant or plants to the work hereunder, subject only to the prior rights, if any, of a department of the United States of America, and will not enter into any other contract or undertake any work or service at its works which will interfere in any material manner with the completion of the work undertaken hereunder.

BONUS AND LIQUIDATED DAMAGES.

Should the Contractor succeed in delivering any of said vessels to the Owner complete before the dates above provided, the Owner agrees to pay, as premium for advanced delivery for each completed vessel so delivered, the sum of Three Hundred Dollars ($300) per day for each and every day gained by such advanced delivery. Should the Contractor fail to deliver any of said vessels on the dates herein fixed, the Contractor agrees to pay the Owner, as liquidated damages on each such vessel, Three Hundred Dollars ($300) for each and every day of delay in delivery of such vessel; but it is hereby agreed that the total premium or liquidated damages so to be paid shall in no case exceed the sum of Twenty-five Thousand Dollars ($25,000) for any such vessel. Premiums or liquidated damages shall be added to or subtracted from the final payment hereunder.

IX.

LIENS AND TAXES.

The Contractor agrees to deliver the vessels to the Owner free and clear of any lien or encumbrance. The Contractor further agrees upon the delivery of each vessel to deliver to the Owner all papers and documents necessary and/or convenient to confer upon the Owner a full an unencumbered title to such vessels, including classification certificates as herein provided, together with a full release by the Contractor to the Owner waiving all further claims or demands of any nature, except any claim or demand in regard and to the extent to which the provisions of Article VII have been and/or are invoked. When a payment is to be made hereunder, the Owner may require evidence satisfactory to it to be furnished showing what obligations for labor and materials, supplies, or equipment used or to be used in the construction of the vessels hereunder are unpaid, and the Owner may at its option, out of any amount not paid to the Contractor hereunder, withhold such amount as may be necessary to satisfy such obligations, or with the consent of the Contractor satisfy the same. In the event of the filing or attaching of any lien or encumbrance (whether valid or invalid) against the vessel before the final payment, the Owner may at its option, out of any amount not paid to the Contractor hereunder, withhold such amount as may be necessary to satisfy such lien or encumbrance or may satisfy or remove the same. The Owner will not exercise its option to satisfy or remove any lien or encumbrance if the Contractor desires to contest it, provided that the Contractor will immediately take such steps as in the judgment of the Owner will prevent such lien or encumbrance from delaying the construction or delivery of the vessels hereunder and will indemnify and save the Owner harmless from any costs, charges, or damages incurred by reason of the contesting of such lien. It is hereby further stipulated and agreed by the Contractor for itself and on its own account and for and on account of all persons, firms, associations, and corporations furnishing labor and materials for said vessels that this contract is upon the express condition that no lien or rights in rem of any kind shall lie or attach upon or against any of said vessels or their machinery, fittings, or equipment, or the materials therefor or any part thereof, or of either, for or on account of any work done upon or about said vessels, machinery, fittings, equipment, or materials, or of any materials furnished therefor or in connection therewith, nor

for or on account of any other cause or thing or of any claim or demand of any kind, except the claims of the Owner.

The Contractor agrees to pay all taxes, if any, which may be assessed or assessable against the materials on hand and the vessels under construction up to the time said vessels shall be accepted by the Owner. The Contractor further agrees to pay all income taxes, excess-profit taxes, and all other municipal State, or Federal taxes which may be assessed or assessable on account of this contract.

X.

CLAIMS AND PATENTS.

The Contractor agrees to protect the Owner from all claims arising from accidents or casualties to employees, workmen, or other persons in, on, or about the work covered by this contract, and to indemnify the Owner against the same.

The Contractor shall be responsible for all claims, if any, made against the Owner for all infringements of patents or patent rights and for the use of all patented articles, and shall defend and save harmless and indemnify the Owner against all such claims, and from all costs, expenses, and damages which it may be obliged to pay by reason of any such infringement of patents or patent rights, or of the use of patented articles, provided that the Owner will in all instances notify the Contractor of any claims made against it by reason of any such infringement or use of patented articles at the time when such claim is made, and will promptly notify the Contractor of any suit or suits brought against it therefor and give the Contractor an opportunity to defend the same, and provided that no payment shall be made by the Owner unless with the consent of the Contractor or pursuant to a decree by a proper court in such litigation. Where the Owner specifically orders the use of the patent or patented article, whether or not the existence of the patent is known to the parties hereto, the Owner will hold the Contractor harmless from any expense, loss, or damage arising from a claim of the infringement or use of such patent or patented article, provided that the Contractor notifies the Owner as soon as such a claim is made and obeys the instructions of the Owner in connection therewith.

XI.

LABOR.

This contract is executed and delivered upon the understanding that, if desired by the United States Shipping Board Emergency Fleet Corporation, provision, satisfactory in form and terms to the United States Shipping Board Emergency Fleet Corporation, restricting the hours of labor of laborers and mechanics employed by the Contractor or by subcontractors and/or providing for the payment of extra compensation for overtime work, will be inserted in the contract, with the same force and effect as if inserted in the contract before the execution and delivery thereof. If by reason of any such instruction the cost of any vessel hereunder shall be increased, then the sum to be paid by the Owner to the Contractor as herein provided shall be agreed upon by the parties and if not agreed upon shall be determined as provided in Article VII hereof.

XII.

NOT ASSIGNABLE.

This contract may not be assigned by the Contractor without the consent of the Owner in writing, provided, however, that nothing in this contract shall be construed as prohibiting the assignment of payments due, or to become due to the Contractor for the purpose of obtaining credit for furthering the construction hereby undertaken, but the Owner may, by writing, make such prohibition.

In order to effectuate the provisions of Article V hereof, the Contractor agrees that every contract made by it for the furnishing to it of parts, materials, supplies, machinery, and equipment, or the use thereof for the purpose of constructing the vessels agreed to be constructed hereunder, will in terms be made assignable to the Owner.

XIII.

MEMBERS OF CONGRESS NOT TO BENEFIT.

No Member of or Delegate to Congress, nor Resident Commissioner, is or shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom, but this Article shall not apply to any contract within the operation or exception of Section 116 of the Act of Congress approved March 4, 1909 (35 Stats., 1109).

XIV.

INSOLVENCY OF CONTRACTOR.

Should the Contractor become insolvent, make an assignment or commit any act of bankruptcy, the Owner may and is hereby empowered forthwith to enter, take possession of, and complete the work without giving any notice thereof to the Contractor.

XV.

LABORERS' AND MATERIAL MEN'S BONDS.

The Contractor agrees to procure and keep in force at its own expense, in some company or companies approved by the Owner, all such bond or bonds for the protection of claims and/or liens of laborers and/or material men, as may be required by the laws of the United States.

XVI.

PERMITS.

The Contractor agrees to comply with all laws, rules, regulations, and requirements of the Departments of the United States affecting the construction of works, plants, and vessels, in or on navigable waters and the shores thereof, and all other waters subject to the control of the United States, and to procure at its own expense all permits from the United States, State, and local authorities which may be necessary to begin and carry on the work hereunder, and at all times to comply with all United States, State, and local laws in any way affecting the work carried on under this contract.

XVII.

CANCELLATION.

The progress of the work shall be at all times satisfactory to the Owner. Should the progress of the work not be satisfactory to the Owner, then the Owner may, upon thirty (30) days' written notice to the Contractor, cancel this contract as to further performance thereof. Thereupon the Contractor shall complete only such vessels, or parts of vessels, as the Owner shall direct in writing. The cancellation shall not affect the terms of the contract as to the vessels completed or directed to be completed.

The Contractor shall be reimbursed for losses sustained by such cancellation. In computing such losses, there shall be included for each vessel under construction a proportionate part of the estimated profit on a completed vessel. Such proportionate part shall not exceed the percentage which the cost of the vessel under construction bears to the cost of a completed vessel. In computing profit or cost, the average actual experience of the Contractor on vessels constructed for the Owner shall be taken as the basis of the computation. In computing such losses the following shall not be included: (*a*) Profits on vessels not under construction; (*b*) profits that the Contractor might have earned in other transactions.

If the parties can not agree upon the amount of the loss, it shall be determined on the above basis and by arbitrators, one to be chosen by each party and the third by the two so chosen, and the decision of a majority of the arbitrators shall be conclusive and binding upon the parties hereto.

XVIII.

EMPLOYMENT OF EMPLOYEES.

The Contractor agrees that it will not employ, nor will it knowingly permit any of its agents to approach with the purpose of employing, a workman employed by any shipbuilder or a member of his supervising or technical force without first obtaining the permission of the Owner and the said shipbuilder. The term shipbuilder as used in this paragraph shall include persons, copartnerships, and corporations operating shipyards independently or as the agents of the United States Shipping Board Emergency Fleet Corporation. The Contractor also agrees that it will not employ nor retain in its employment as consultant assistant or agent or otherwise, either directly or indirectly, any person who may be wholly or partially in the employment of the Owner or of any governmental agency unless approved by the Owner.

XIX.

CHECKS.

Payments hereunder shall be made by the Owner, by check, addressed to the Contractor, by mail at San Diego, Cal.

In witness whereof the parties hereto have caused this contract to be signed by their respective officers and their corporate seals to be hereunto affixed, duly attested, on the day above stated.

U. S. STEEL SHIPBUILDING CORPORATION,
By ADAM F. WECKLER,
General Manager.

[SEAL.]
Attest:
ELLIS GEIGER, *Secretary.*

Countersigned:
A. V. EBERHART.

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION,
By CHARLES PIEZ, *Vice President.*

[SEAL.]
Attest:
LESTER SISLER, *Secretary.*

SCHEDULE B.

Shipments of steel from the mills for the first two vessels, to commence not later than sixty (60) days after receipt of the Contractor's steel schedules by the Emergency Fleet Corporation, and to continue in the sequence and at the rate specified therein.

Shipments of steel from the mills for the second two vessels, to commence not later than ninety (90) days after receipt of the Contractor's steel schedules by the Emergency Fleet Corporation, and to continue in the sequence and at the rate specified therein:

Estimated amount of steel for each vessel: 2,284 net tons Plates, at 3¼ cents per lb.; 861 net tons Shapes, at 3 cents per lb.; 20 net tons Rounds and Flats, 2.9 cents per lb. (f. o. b. mills).

SCHEDULE E.

[Information requested by Senator Johnson.]

SUBMARINE BOAT CORPORATION.

The stock of this corporation is widely held. The officers and directors are as follows: Henry R. Carse, president; H. R. Sutphen, vice president; Laurence Y. Spear, vice president; G. C. Davison, vice president; Thomas C. Dawson, secretary and treasurer; L. T. Moore, assistant treasurer. H. R. Carse, H. R. Sutphen, L. Y. Spear, G. C. Davison, T. G. Dawson, George W. Hoyt, H. C. Sheridan, Stacy C. Richmond, A. L. Scheuer, Isaac L. Rice, jr., William H. Remick, directors.

The Submarine Boat Corporation owns the stock of the Electric Boat Co. The Electric Boat Co. owns the Holland Torpedo Boat Co., the Electric Launch Co. of New Jersey, the Electro-Dynamic Co. of New Jersey, the New Jersey Development Co., the Industrial Oxygen Co., the International Torpedo Co., and the New London Ship & Engine Co. The officers and directors of the Electric Boat Co. are all officers and directors of the Submarine Boat Co.

AMERICAN INTERNATIONAL CORPORATION.

This corporation is interested at least in the following enterprises: With its associates, W. R. Grace & Co., in the Pacific Mail Steamship Co. It acquired the capital stock of the Allied Machinery Co. of America, which conducts an export business in machine tools. With Stone & Webster it is interested in the Latin-American Corporation. It is interested in the Rosin & Turpentine Export Co., in the International Mercantile Marine Co., the United Fruit Co., the American International Terminals Corporation. It is interested with the Simes-Carey Co. in the China Corporation and the Simes-Carey Railway & Canal Co. It is interested in Carter, Macy & Co. It has purchased the property of the New York Shipbuilding Co., and it and the International Mercantile Corporation, W. R. Grace & Co., and the Pacific Mail Steamship Co. organized the New York Shipbuilding Corporation. Its officers and directors are as follows: Officers, F. A. Vanderlip, chairman of the board; C. A. Stone, president; G. J. Baldwin, senior vice president; H. D. H. Connick, Philip W. Henry, Robert F. Herrick, Frederick Holbrook, William S. Kies, R. B. Sheridan, Willard Straight, R. P. Tinsley, vice presidents; Cecil Page, secretary; T. W. Streeter, treasurer; K. F. Clark, assistant secretary; Percy Mayes, assistant treasurer, New York. Executive committee, F. A. Vanderlip, C. A. Stone, O. H. Kahn, Ambrose Monell, P. A. Rockefeller, T. N. Vail, William Woodward; directors, J. Ogden Armour, J. A. Coffin, W. E. Corey, Robert Dollar, J. P. Grace, R. F. Herrick, Pierre S. du Pont, Otto H. Kahn, R. S. Lovett, Ambrose Monell, H. S. Prichett, Percy A. Rockefeller, John D. Ryan, W. L. Saunders, J. A. Stillman, C. A. Stone, Guy E. Tripp, T. N. Vail, F. A. Vanderlip, E. S. Webster, A. H. Wiggin, Beekman Winthrop, William Woodward. The officers and directors of the New York Shipbuilding Corporation are as follows: George J. Baldwin, chairman of board; S. M. Knox, president; H. A. Magoun, first vice president; N. de Taube, second vice president; J. T. Wickersham, secretary and treasurer; Cecil Page, assistant secretary; A. C. Connell, assistant secretary and assistant treasurer; A. D. Brigham, assistant secretary; Percy Mayes, assistant treasurer; H. J. Smith, assistant treasurer; George J. Baldwin, P. A. S. Franklin, Lawrence H. Sherman, executive committee; George J. Baldwin, Joseph A. Bennett, P. A. S. Franklin, Joseph P. Grace, E. W. Harden, Robert F. Herrick, W. S. Kies, S. M. Knox, Ambrose Monell, William F. Morgan, James H. Perkins, L. H. Shearman, Charles A. Stone, E. P. Swenson, H. H. Wehrhane, directors.

Over half of the common stock of the American International Corporation was set aside to be offered to stockholders of the National City Bank.

MERCHANT SHIPBUILDING CORPORATION.

We have no information as to the stockholders. Our information as to the officers and directors is as follows: Officers, R. H. M. Robinson, president; W. Hamilton, vice president; C. B. Seagar, second vice president and comptroller; J. A. Kissick, secretary; A. D. Wagner, treasurer; directors, W. A. Harriman (chairman), R. H. M. Robinson, F. S. Pryor, C. W. Hamilton, Payne Whitney, C. B. Seagar, Elton Parks, W. H. Pleasants, C. C. Tegethoff.

The information given above is obtained chiefly from Moody's Manual, 1917.

The CHAIRMAN. Then I have also a letter from Mr. Herbert J. Anderson, of San Francisco, Cal., who testified before the committee a few days ago, to the effect that he is not posted in regard to financial matters, and he may have made some mistakes in his statements to the form of contract had with the Fleet Corporation by Moore & Scott Iron Works. The letter explains itself, and will be inserted in the record of the hearing.

(The letter referred to is here printed in full as follows:)

[Moore & Scott Iron Works. San Francisco office and shops, 672 Second Street. Main office and shipyard, foot of Adeline Street, Oakland.]

WASHINGTON, *D. C., February 13, 1918.*

TO THE CHAIRMAN AND MEMBERS OF THE
COMMITTEE ON COMMERCE,
United States Senate, Washington, D. C.

GENTLEMEN: On February 5 I appeared before your honorable committee at the suggestion of Mr. Piez, of the United States Emergency Fleet Corporation, to answer questions regarding labor conditions at the yards of the Moore & Scott Iron Works, of Oakland, Cal.

While before your committee certain questions were asked me regarding financial matters, and the form of contracts our company had with the Fleet Corporation. I stated at the time that I was not familiar with the financial arrangements or details of the company's business, the same being entirely out of the line of work I am following. On the further questioning of the Senators on the subject I became confused and made answers which I have since been told were in error. The cost-plus contract referred to is on a basis of cost plus a fixed fee and not cost plus 10 per cent as stated.

In view of the above facts I would respectfully request that all answers made by me pertaining to financial matters and contracts with the Fleet Corporation be withdrawn.

Respectfully, yours,

HERBERT J. ANDERSON.

The CHAIRMAN. Then there is another letter from Mr. Piez, inclosing a memorandum furnished him by the general auditor of the Fleet Corporation, of the expenditures at Hog Island, to date. The letter and the statement of expenditures had better go in the record.

(The letter and statement referred to are here printed in full as follows:)

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, February 9, 1918.

Hon. DUNCAN U. FLETCHER,
United States Senate, Washington, D. C.

MY DEAR SENATOR: I inclose a memorandum furnished me by the general auditor of expenditures at Hog Island to date. The first item represents the amount expended for construction of plant, and the second, the amount expended for material ordered for vessels.

Sincerely, yours,

CHARLES PIEZ,
Vice President and General Manager.

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, February 7, 1918.

Refer to DHB/CKF.

Memorandum to Mr. Piez, vice president and general manager:

1. In accordance with your instructions, I hand you herewith expenditures at the Hog Island yards up to January 31, 1918:

Plant	$19,029,972.42
Ships	4,283,390.26
Total	23,313,362.68

D. H. BENDER,
General Auditor.

The CHAIRMAN. I have also received a communication from Mr. Hurley, chairman of the Shipping Board and president of the Fleet

[illegible] dated February 4, 1918, relative to the necessity of [illegible] reinforced concrete ships. Mr. Hurley transmits a copy [illegible] report on concrete construction, dated January 30, 1918, [illegible] of the personnel of the department of concrete ship [illegible] of the Fleet Corporation. These last named papers have [illegible] been printed in the record, but Mr. Hurley's letter on the [illegible] will be inserted at this point.

[illegible] referred to is here printed in full as follows:

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION
[illegible]

[illegible]AN U. FLETCHER,
[illegible] Committee on Commerce,
United States Senate, [illegible]

[illegible]: Replying to your letter of January 29, I would advise that the [illegible] Fleet Corporation has not neglected giving consideration to the pro[illegible] constructing reinforced concrete ships. Since April 1917, the [illegible] of the United States Bureau of Standards have been giving con[illegible] to this matter for the Emergency Fleet Corporation. In December [illegible] department of concrete ship construction was organized, using the [illegible] of the Bureau of Standards as a nucleus. This department is now [illegible] of 36 employees, embodying some of the most competent reinforced [illegible]ngineers and naval architects in the United States. The facilities [illegible]hnical division of the corporation have also been utilized by this [illegible]t.

[illegible] for a reinforced concrete ship of 3,500 tons cargo capacity will be [illegible] March 1. Three contracts have been let for experimental ships of [illegible] 3,500 tons capacity, to be built on designs furnished by the con[illegible] Two additional contracts, one of 3,500 and another of [illegible],000 tons, are [illegible]otiation. We do not feel justified in entering into a comprehensive [illegible]or the construction of concrete ships until several of these experi[illegible]ps have been given trial. Such information should be available by [illegible]ne. All suggestions made by engineers are given careful consideration [illegible]tilized wherever possible.

[illegible] herewith I am sending you a copy of progress report with chart [illegible] personnel of the department of concrete ship construction.

[illegible]ectfully,

EDWARD N. HURLEY,
President.

[illegible]HAIRMAN. Now, Senator Ransdell, will you proceed?

[illegible]r RANSDELL. Mr. Chairman, we had some discussion before [illegible]ittee recently in regard to the use of boats or barges on the [illegible]al. The question was placed before us, rather [illegible] [illegible]or not the Government should build barges, [illegible] [illegible]ld be built by private persons. Several [illegible] [illegible]bject.

[illegible] also some testimony before the committee [illegible] of the Government placing boats on the [illegible] the State of Alabama.

[illegible]o gentlemen whom I have brought here [illegible] [illegible] city, and they came to the committee [illegible] Mr. James E. Smith, of St. Louis, [illegible] [illegible]t business men of that city, and Mr. [illegible] La., who is a very prominent citizen [illegible] [illegible]tlemen are largely connected [illegible] [illegible]horoughly posted on water transpo[illegible] [illegible] give the committee the benefit [illegible] [illegible]pi River is [illegible] to solve [illegible]

[illegible]E

fere in but a small degree with war industries as compared with the building of railway equipment.

This traffic will be handled along channels which are free from any possibility of congestion, and the capacity of this improved river, whereon continuous navigation by the most economical of units at all times available, is practically unlimited. A thousand barges could be just as readily handled thereon as 200. An important factor in the comparison between water and rail transportation under present conditions is the relatively smaller demand for skilled labor in connection with water craft. The new barge canal from Buffalo to the Hudson River, we are told, is capable of handling up to 10,000,000 tons annually, and provides a free, direct connection to the whole of the Northwest along uncongested routes. By using these two waterways—and there are many others that could also be used to distinct advantage—we could within 12 months relieve the railroads of at least 10,000,000 tons of traffic for long hauls and place that traffic away from the congested terminals.

I have said nothing about the relative economy of water and rail transportation. To anyone really conversant with water operation, given a continuous navigable channel of 8 feet or more in depth with proper equipment and suitable terminals, it is beyond argument that the cost of the water haul will discount the railroad haul by 50 per cent. However, if the cost of water transportation were even greater than that by rail, we contend that under present conditions it is the extreme of folly to confine ourselves to railroad transportation alone.

We therefore earnestly hope that the provision in the railroad bill whereby the President is given the power to obtain and operate equipment for transportation purposes upon the inland and coastwise waterways will receive the approval of Congress and the earnest and active consideration of the Director of Railroads.

Senator NELSON. Mr. Sanders, I will say, for your information, as the matter was smothered by the newspapers in some way, that while the State engineer of New York, who is in charge of the New York Barge Canal, came before the committee and urged that the Government build barges for the canal, two or three days afterwards, Mr. Tomlinson, of Duluth, Minn., a shipbuilder, who is building a number of ships for the Government, has organized a company with $3,000,000 capital, and is ready to build 100 steel barges for the Erie Canal, without any expense to the Government; all that he requires is that the Government will not compete with him.

Mr. SANDERS. I have read Mr. Tomlinson's testimony, sir, upon that subject.

Senator NELSON. Well, the newspapers did not say anything about it.

Mr. SANDERS. No. And it struck me that Mr. Tomlinson had a very distinct and a very pertinent interest in his project—and it was a perfectly correct one. He has a line of steamships now operating on the Great Lakes, and he needs that connection to get his material to New York, thereby obtaining the long haul, which is what the railroads are always seeking. It is quite proper that he should build those barges for traffic of that kind.

Senator NELSON. And he said he thought the capacity of the Erie Canal would be 400 or 500 barges; that is, that that would be about

what could be easily handled. And he agreed to build one-fourth or one-fifth of them without any expense or cost to the Government.

Senator REED. Who was to build the other four-fifths of the barges?

The CHAIRMAN. He did not care, so long as the Government did not build them.

Senator NELSON. He did not ask any help whatever from the Government; all that he asked was that the Government should not go into competition with him.

Mr. SANDERS. That is a very laudable enterprise.

Senator VARDAMAN. He asked also that the Government should not commandeer his barges.

Senator NELSON. The Government is not likely to commandeer barges on the Erie Canal.

The CHAIRMAN. Those barges that you speak of on the Mississippi River, Mr. Sanders, have you estimated the size of them?

Mr. SANDERS. The Board of Trade of New Orleans appointed a special committee to investigate the question of the rehabilitation of the commerce of the Mississippi River. That committee sat for a long time, heard all kinds of evidence, and considered the matter in all its bearings; and it was ready to recommend the organization of a private company with the object of building a fleet of boats to operate on the Mississippi River between St. Louis and New Orleans. But, unfortunately for that enterprise, there was then an enormous increase in the cost of the equipment. And to-day it is a commercial impossibility for any man to embark successfully and profitably in the operation of the river boats, unless it is to take care of his own private trade, because the cost of his equipment would be prohibitive.

Senator NELSON. You are aware of the fact that the Shipping Board has made arrangements, with the aid of the War Department, through the office of the Chief of Engineers, for the construction of 24 barges and, I think, 6 tugboats.

Mr. SANDERS. Four tugboats; that is for private interests at St. Louis.

Senator NELSON. And they set aside money for that purpose?

Mr. SANDERS. Yes, sir.

Senator NELSON. And it is in the hands of the Chief of Engineers of the War Department?

Mr. SANDERS. Yes, sir.

Senator NELSON. But I can not find out what steps he has taken, if any.

Mr. SANDERS. I understood the other day that the Chief of Engineers stated that the plans are not yet complete. This is five months after that arrangement was made, and the plans are not yet completed.

Senator NELSON. Does it take such extensive plans for those barges that it requires five months to prepare them?

Mr. SANDERS. Well, it can not be any more difficult than the planning of ships; and it would be a poor ship designer who could not plan a fleet of 100 ships in that time.

Our point is this: The whole argument is based upon the necessity of assisting the railroads in handling the largely increased transportation, due to the war, in the next one or two years, or as long as the

war lasts. Our belief is that the railroad men have never realized the extent of the problem before them; and that is one reason, perhaps, why they have failed so utterly.

Senator NELSON. And up to the time of the war they played a game of "freeze-out" against water transportation, did they not?

Mr. SANDERS. Yes, sir. They gave us assurances at that time that they would cooperate with water transportation; and we endeavored for three or four months to push along private enterprise in the direction of water transportation, until prices of material became prohibitory, and it was quite evident that private enterprise would not take it up.

My contention is this, that if we rely upon private enterprise to give us any immediate material relief we are going to be sadly deceived. It is not a natural or a reasonable expectation to look to private capital under present conditions. If there is any merit in the claim as to the necessity for increased transportation, it is essentially as a Government enterprise and as a war measure that it should be developed during this war.

Senator NELSON. Well, the Shipping Board has set aside ample money out of its funds for the building of 24 barges. I believe that was done two months ago.

Mr. SANDERS. It was five months ago.

Senator NELSON. And yet no steps have been taken to build them!

Senator RANSDELL. The plans have not yet been completed, I was told.

Senator NELSON. It takes five months or more to make plans for 24 river barges?

Senator RANSDELL. I can not say; but that is what I was told—that the plans had not been completed.

Senator REED. I might say, if you will pardon me, that I had a talk with Gen. Black, the Chief of Engineers, yesterday, or the day before, and I think I can quote him correctly. He stated that they had been getting up plans for the power boats. The barge is not a difficult thing to build; but they have been, as I understood him, for a year or a year and a half, working under an act of Congress which provided a small fund for the purpose of ascertaining the best kind of power boat for river traffic.

Mr. SANDERS. It is six years that they have had, sir.

Senator REED. Six years; well, I did not know it was so long. Gen. Black said they had been working with that, and that they had now fixed upon a style of boat; he thought they had discovered the solution of the difficulties that had arisen with the old style of boat; briefly, they had found that what was needed was a 2,000-horsepower boat, whereas the old boats had been equipped with about 500-horsepower engines. He said that had been determined upon, and those plans had been substantially completed; but as I understood him, not quite completed. So that all of this time, I think, has been consumed, not on the question of barges but on the power boat, which, of course, is more difficult.

Senator HARDING. I would like to ask this question: Is it a fact that the coal barges which came from the Kentucky, the West Virginia, and the Pennsylvania coal fields in recent years were abandoned after their cargoes were removed?

Mr. SANDERS. They were, to a large extent, Senator; the Monongahela Co. would bring thousands of tons of coal in tows; they built rough barges, at a cost of approximately $1,000 a barge at that time; and those barges each carried 800 or 900 tons of coal. They towed those barges down to New Orleans; and the barges were so flimsy that all the time they lay in the still water their pumps had to be kept going to keep afloat; and if there was any kind of a storm they would lose—and they did actually lose on many occasions—200,000 or 300,000 tons of coal by the sinking of the barges. Those barges were of very cheap and poor construction.

Senator HARDING. They were only built for one trip?

Mr. SANDERS. They were only built for one trip; it was very extravagant method of transportation.

Senator HARDING. What do you know about a great many barges being tied up along the Kanawha and the Ohio River coal fields? Do you know anything about that?

Mr. SANDERS. I am not sure that there are very many just now; but there is an old fleet that for many years plied from St. Louis to New Orleans carrying grain, a very competent fleet of barges, I have been told. That fleet was purchased bodily by Jay Gould, so it is said: and we know that it was allowed to lie there in the river and rot. Some of those barges are still afloat to-day, although they have not been used for 20 years. That was the method which was used of getting rid of a very serious competition for his railroads; several times the value of those barges was paid for them.

Senator REED. Let me say this about barges, because I think it fits into this particular inquiry: There is no question about the fact that two railroads, side by side, can not both continue to exist if one of them is equipped with the very best kind of engines and has the best kind of track and the best kind of equipment and the other one has engines and tracks of 30 years ago. The railroads came into competition with river transportation, and it was a destructive competition; and in my opinion any attempt to restore competition by river transportation with the old-fashioned and obsolete equipment would be a failure.

Mr. SANDERS. Yes; it would.

Senator REED. And that, evidently, is the idea of Gen. Black; he states that whereas the power boats that have been used in the past on those rivers had 500 horsepower, what is required is a 2,000-horsepower engine.

And in addition to that comes the question of the barge. The proposition that they are working on is that these powerful towboats shall be hitched to steel barges if the steel can be obtained—large barges.

Now, a steel barge is very much lighter than a wooden barge; that is, when you get into the large-sized barges. Besides it is very much safer.

And with that kind of equipment and that kind of boat I do not think there is the slightest doubt that river transportation can be restored and carried on, particularly when the—I will use the term, although I do not like to use it—"cut-throat" competition that has been heretofore employed by the railroads is removed. And that, of course, is now removed during the period of this war at least.

Senator HARDING. What I was trying to get at, Senator Reed. wholly as a matter of information.

Senator REED. Yes; I understand.

Senator HARDING. And it just occurred to me that if the operators could afford to build barges and allow them to be junk when they reached their destination rather than haul t back for another cargo there must be a tremendous expense invo in taking a fleet of empty barges back to the loading points.

Mr. SANDERS. Well, they abandoned it finally, Senator, bec it did not pay; their policy proved to be a serious error. And t was also the error that Senator Reed mentions, that their towl were not sufficiently powerful to haul back quickly any large : For instance, they would push 20 or 30 barges down the r Now, in order to tow those barges up the river it would have necessary, without doubt, to have a towboat with 2,000 horsepo So that it seems quite natural and possible that they abandoned t for that reason.

Senator HARDING. Do you know how long it would take a barg go from the Big Kanawha River to New Orleans?

Mr. SANDERS. No, sir; I do not know. There was, of cours that time difficulty on account of an insufficient depth of water, frequently the barges would have to lay up en route waiting f rise in the river. That difficulty has been overcome now from Louis to New Orleans by the new Government channel.

Senator HARDING. Well, you are aware, are you not, that we preparing now for a 9-foot stage in the Ohio River?

Mr. SANDERS. Yes, sir; and there will be no difficulty the having those barges come down from Cincinnati. There will b 8-foot stage right through to New Orleans, and you can then r that journey in 10 days with barges of 2,000 or 2,500 tons cap each.

The figures of our committee show that a towboat from St. I to New Orleans would bring five barges of 2,000 tons capacity or 10,000 tons in all, and would make the journey in seven or days.

Senator HARDING. From St. Louis?

Mr. SANDERS. Yes, sir; and it would make the round trip, a ing for contingencies of all kinds, in 20 days.

Senator RANSDELL. And would get a return cargo?

Mr. SANDERS. Yes, sir; bring back a return cargo of fully 2 cent of the capacity of the barges.

Senator RANSDELL. Whereas those old barges did not take return cargo?

Mr. SANDERS. No, sir; they did not take any return cargo.

Senator RANSDELL. You spoke about those old towboats ta down the river 25 or 30 barges. There was one of those boats steamer *Sprague*, that went down the Mississippi River with 5 tons of cargo?

Mr. SANDERS. Yes, sir; she handled an enormous cargo.

Senator RANSDELL. It was the greatest cargo ever moved single boat and was taken down the Mississippi River by the ste *Sprague*; it is greater than any cargo ever taken at one time. on the ocean.

Mr. SANDERS. With one power.

Senator RANSDELL. Yes; with one power.

Mr. SANDERS. Yes. Of course, they practically floated down; they did not push the barges very much; the power was used principally to steer them. The modern idea is to push the boats—to push them at a speed of 6 or 7 miles an hour.

Senator RANSDELL. I would like to ask you, Mr. Sanders, if these boats were to be built by the Government, or some proper authority, and were properly handled, would they be able to do business enough to make them pay; and if so, where would that business come from?

Mr. SANDERS. Well, sir, if I were promoting a private enterprise, I should do, as every careful business man would—I should start in a small way and build up. That is what any private enterprise will do. That is why it will not help in this present emergency to use private enterprise at all. Then, after the private enterprise had built their trade, as their trade increased they would increase their equipment, and there is not the shadow of doubt, according to the view of our committee—a committee of men conversant with the subject—that, at the prices which existed before the war, an equipment suitable could be built and could be operated very profitably—at 80 per cent of the existing railroad rates from St. Louis to New Orleans—and those railroad rates are lower than the average river rates in the country, and, of course, very much lower than the average rail rate in this country.

Senator RANSDELL. When you say "before the war," do you mean before the United States got into this war or before the war broke out in 1914?

Mr. SANDERS. Well, I should say two and a half years ago prices began to advance very rapidly.

Senator NELSON. Would you have the Government operate those boats?

Mr. SANDERS. As a war measure, so long as the Government controls the railroads it is our contention that it ought to control the water transportation, too. After that, I am convinced that there will be no difficulty in disposing of that equipment at reasonable prices to private parties; they will have built up considerable trade for them.

Senator RANSDELL. Is it not a fact that commerce has been driven from the Mississippi River, between St. Louis and New Orleans, by railroad competition, or it has been driven away from there by some cause?

Mr. SANDERS. Well, I would say by two, or possibly three, causes:

First. The irregular channels that formerly existed in the Mississippi River; there would be a channel for a month or two and then there would be no channel, and you can not operate a transportation line of any kind without continuity and regularity of service.

Second. The very low railroad rates helped to drive away the river transportation. The railroads, in order to meet water competition, made very low rates. At many points along the river the railroad rates continue to-day very much lower than the rates to points that are not on the river.

And then there was a third reason, and that was that it was quite evident, with this railroad competition, which was exceedingly keen, investors were shy of investing in river traffic, and hence the equipment was not kept up to date and modernized as conditions required.

Senator RANSDELL. Capital was afraid to invest in the boats, was it?

Mr. SANDERS. Absolutely.

The CHAIRMAN. Was not another cause of the falling off of the river commerce the lack of terminals at the shipping points and the proper facilities for loading and unloading the freight?

Mr. SANDERS. The terminals suited the old type of river traffic, Mr. Chairman; but they would not have suited modern methods, and proper terminals would have to be built. They are building municipal terminals in St. Louis to-day; they are also arranging to build them at Memphis; they already have the money appropriated, and the plans, I understand, are drawn. In New Orleans, there are terminals as fine as any in the country, and those terminals will take care of modern traffic in an expeditious manner. Speed, of course, is essential to commercial enterprise to-day.

Senator RANSDELL. There is a vast commerce, I understand, to be moved down the Mississippi River, and up the river, either by water or by rail, is there not?

Mr. SANDERS. Yes, sir; there certainly is.

Senator RANSDELL. And could we not relieve the congestion that exists now to such a great extent at nearly all of the Atlantic ports, if the vast volume of commerce from the interior of this country could go down the Mississippi River to be sent abroad from New Orleans, or Mobile, or Galveston, or some of those other ports on the Gulf?

Mr. SANDERS. Yes, sir; without a doubt. The theory that has resulted in the congestion of the Atlantic seaboard is a perfectly correct one, so far as it goes—that is, that there is a scarcity of ocean-going ships; and therefore we must make those ocean-going ships turn around as quickly as possible; that is, take the shortest sea voyage to Europe, which is from those North Atlantic seaports. The voyage from either Boston or New York is nearly 50 per cent shorter than it is from the Gulf ports to Europe. Hence it seemed to be a reasonable and proper thing for all of those Governments, that were buying supplies in this country, to send all the tonnage to those ports and to send all the traffic to those ports.

The mistake that they made was that the ports of the North Atlantic can never, within any reasonable period of time, accommodate such an enormous concentration of business: it will require all of the ports of the United States to handle the traffic that is being sent overseas to-day. And, as a result, that congestion at New York has more than discounted, many times—by delaying steamers in New York, some of them for a month at a time—any advantage that they have on account of the shorter sea route.

As a matter of fact, if you start your cargo from the Middle West, from St. Louis, for example, and that territory around there, and you are sending it to Europe, you can put it in Europe very much quicker by sending it down the Mississippi River to New Orleans than you can by sending it by rail to the North Atlantic ports.

Senator REED. That is, until the time when the traffic becomes qualized and the congestion relieved?

Mr. SANDERS. Well, I would hardly make that qualification of my tatement, because it never has been practicable to carry freight rom St. Louis to New York in much less than 15 days; whereas ou can carry it down the Mississippi River in 7 days.

Senator REED. It is the haul across the country that you are peaking of?

Mr. SANDERS. Yes, sir; it is the railroad haul.

Senator VARDAMAN. That is a very small estimate of the time that vould be required to carry it on the railroads.

Mr. SANDERS. I have known of cotton being sent from the South to Europe via New York that did not get to Europe in six months.

Senator RANSDELL. What you have said, Mr. Sanders, about river ransportation to New Orleans, by way of St. Louis, would also ıpply, to some extent, to river transportation to St. Paul and Kansas City, would it not?

Mr. SANDERS. Yes, sir; they have about a 5-foot channel to St. Paul.

Senator RANSDELL. It is more than that to Kansas City, is it not?

Mr. SANDERS. Yes, sir.

Senator NELSON. They have a broken stage on the river to St. Paul ınd Minneapolis of about 4 or 5 feet, have they not?

Mr. SANDERS. About the same, but very irregular.

Senator NELSON. And they can use pretty good barges with a -foot channel, can they not?

Mr. SANDERS. Yes, sir.

Senator NELSON. But the trouble would be to get cargo for more han one way?

Senator REED. Well, Senator Nelson, I think that would be, in part, ıt least, solved by the proposition that is now being made to haul ron ore; and that is the purpose of that upper Mississippi boat line hat the President is going to have started.

Senator RANSDELL. That is, to carry iron ore down the river and oal up the river?

Senator REED. Yes; iron ore down the river and coal up the river.

Senator NELSON. Last fall they tried the experiment of taking one r two barges loaded with plows and other farming implements from he Moline Plow Co.; the boats came up there to Minneapolis; but hey had no return traffic.

Senator REED. From Minneapolis back?

Senator NELSON. Yes.

Senator REED. Well, if they could get that iron ore, they would ave that return traffic.

Senator NELSON. Well, of course, they would have to ship it by ail from the mines to Minneapolis or St. Paul, and then they could hip it by water to St. Louis?

Senator RANSDELL. Well, I have been told that it is not much arther from the iron mines to Minneapolis than it is from those ıines to Duluth. The way it is handled now it has to be loaded on ıe cars and taken by rail to Duluth, where it is loaded on the boats) be taken through the Great Lakes——

Senator NELSON (interposing). Well, there is no comparison beween the distances in those two cases; if you care to examine into

that. I have a map in my office which will show you that it is very much nearer from the mines to Duluth than to St. Paul and Minneapolis.

Senator RANSDELL. I know that it is farther to St. Paul, but not very much farther.

Senator NELSON. Yes; there is a considerable difference; it is more than twice as far.

Mr. SMITH. The railroad rate from the mines to Duluth is the same as the rate to Minneapolis.

Senator NELSON. That may be true.

Mr. SMITH. Of course, it is a greater distance to Minneapolis.

Senator NELSON. Well, those iron companies charge an enormous rate; the companies that own the mines also own the railroads; and in order to freeze out private mine operators, they charge enormous railroad rates on their ore shipments.

Mr. SMITH. Yes, sir; that is true.

Senator REED. Well, I understand that there is a company which has been organized in St. Louis, and which is thoroughly financed, that proposes to manufacture at that place; and they propose to get their iron ore from——

Senator RANSDELL. The Mesabi Range?

Senator REED. Yes; the Mesabi Range. And then the proposition is to carry coal and other freights in the other direction. I am informed—and I believe you spoke of this yourself, if I understood you correctly—that they have already taken the preliminary steps toward the putting on of a line of barges on the upper Mississippi River.

Senator NELSON. It was tried as an experiment last year.

Senator REED. Well, they are going ahead now, I understand; and they are going to get their traffic running down the stream, or the main part of it, from that iron ore on the Mesabi Range.

Mr. SANDERS. Yes, sir.

Senator REED. And I make the prediction that you will be shipping flour and wheat that way before very long, if they ever get it going and going right.

Senator RANSDELL. And implements of every kind that are manufactured along the river, farming implements of every kind and description will be carried all the way down the river.

Senator REED. Yes.

Senator RANSDELL. Mr. Sanders, your statement made very clear, I think, how much of a plant or how many boats the Government ought to provide.

Mr. SANDERS. Mr. Smith will give you the details as to that, Senator Ransdell.

Senator RANSDELL. All right. How quickly do you think we can get those barges completed?

Mr. SANDERS. If it is decided that you can not get the steel and that it is necessary to build wooden barges, they can be built in six months; and I suppose the steel barges, if the steel can be obtained, can be completed in about the same time.

Senator RANSDELL. And you feel sure, do you, that we can get men along the river to build those boats, and that their construction will not interfere with the construction of ships?

Mr. SANDERS. Absolutely.

Senator RANSDELL. You have gone into that question, have you?

Mr. SANDERS. Yes, sir.

Senator NELSON. Of course, the river will be open all the year from St. Louis down?

Mr. SANDERS. Yes, sir; practically all year round from Cairo.

Senator NELSON. But from Minneapolis or St. Paul, you can count on four or five months when it will be closed?

Mr. SANDERS. Yes, sir.

Senator RANSDELL. It will not be closed as much as traffic along the Great Lakes is?

Seantor NELSON. Yes; it is closed a little longer there; and it is closed about five months on the Erie Canal, is it not, Mr. Sanders?

Mr. SANDERS. Yes, sir.

Senator RANSDELL. Mr. Sanders, in saying that you can not get private capital to invest in the construction of these boats, I want to bring out the fact that you have tried very hard, you and Mr. Smith and your associates, to find private capital, have you not?

Mr. SANDERS. Yes, sir; both at New Orleans and at St. Louis.

Senator RANSDELL. You have made every effort possible to get the private capital to go into the business, have you not?

Mr. SANDERS. Yes, sir; we had no idea of asking the Government to construct these barges, until the matter came up as a war emergency.

Senator RANSDELL. Your idea originally was to develop it as a private enterprise, was it not?

Mr. SANDERS. Yes, sir: our interest in it was solely as a private enterprise.

Senator RANSDELL. And you have had committees of the best and most prominent business men in the various cities along the river working with that end in view, have you not?

Mr. SANDERS. Exactly; we have had conferences with representatives from 30 or 40 of the different cities.

Senator RANSDELL. And you are confident that if the Government does not build those boats they will not be built?

Mr. SANDERS. Not until prices become more normal; and when that will be I do not know. It would not be a good commercial proposition for any man to build these boats at the present prices.

The CHAIRMAN. Is the railroad traffic congested now between St. Louis and New Orleans?

Mr. SANDERS. No, sir; not seriously, anyhow; that is not the congested part of the country. Our supposition is that, there being one Director General of Railroads, and they all being operated as a unit, any equipment that is not needed at one place will be transferred to points where it is needed badly, and that gives direct relief to the whole situation.

Senator RANSDELL. I was going to suggest that that would relieve the situation if we could take that commerce and carry it down the Mississippi River.

The CHAIRMAN. Well, if your railroads can carry it, why do they not carry it now?

Mr. SANDERS. Well, they are carrying the present traffic fairly well

Senator RANSDELL. And it is a much more expensive service than it would be by water?

Mr. SANDERS. Considerably.

Senator RANSDELL. And the water service will be very much cheaper, will it not?

Mr. SANDERS. There is not the shadow of a doubt about that; it is beyond controversy.

The CHAIRMAN. Mr. Sanders, you have not gone into the question of the expense?

Senator RANSDELL. Mr. James E. Smith will tell the committee about that.

Mr. Sanders, we are very much obliged to you for your statement.

Senator REED. I would like, if Mr. Sanders is finished with his statement, for the committee to hear Mr. Smith now.

STATEMENT OF MR. JAMES E. SMITH, PRESIDENT MISSISSIPPI VALLEY WATERWAYS ASSOCIATION, ST. LOUIS, MO.

Senator RANSDELL. Mr. Smith, will you tell the committee who you are and some of your business connections?

Mr. SMITH. My name is James E. Smith. I am a merchant and manufacturer. At present I am president of the Mississippi Valley Waterways Association.

Senator RANSDELL. How many years were you connected with the Simmons Hardware Co., and what was your connection with it?

Mr. SMITH. Thirty-seven years; for 20 years I was the vice president of the company.

Senator RANSDELL. You were one of the active heads of it for quite a while, were you not?

Mr. SMITH. Yes, sir.

Senator RANSDELL. And we all know what an immense concern that is.

Mr. SMITH. Mr. Chairman, will you allow me to read a short preliminary statement on the subject which I have prepared?

The CHAIRMAN. Yes; certainly.

Mr. SMITH (reading):

In response to the request from our Government for suggestions as to how our transportation facilities might be increased during the war in which we are engaged, a committee representing the commercial organizations of the Mississippi Valley have suggested that certain of our most important navigable waterways which are capable of carrying an enormous tonnage should immediately be used by the Government in order to relieve the serious congestion which now exists upon the railways of our country.

The two water routes of the greatest importance and capable of carrying the greatest tonnage are the New Erie Canal, which will be completed within the next few months, and the lower Mississippi River from St. Louis to New Orleans, where there is now a dependable, navigable channel with not less than 8 feet of water available all the year through.

There is practically no modern equipment upon either of these great waterways at the present time, and the reasons for these unfortunate conditions are so well known that it is unnecessary to mention them.

Now that the Government has taken over the operation of our railways should also put into use these great highways of commerce which are now idle and which can be made to carry great quantities of freight, and by coordinating the railways and such water routes as are suitable and available, the serious congestion of traffic from which our entire country is now suffering may be to a large extent relieved.

It is frankly admitted, even by railroad representatives, that they are unable, without a very large addition of rolling stock, additional tracks, and increased terminal facilities, to handle efficiently the present volume of our country's traffic. It is extremely doubtful whether such added equipment and facilities as can possibly be obtained under existing conditions would enable the railways to efficiently handle the enormous war tonnage that will have to be carried, together with the irreducible minimum of our domestic traffic.

There are thousands of miles of waterways at this moment available for transportation purposes. While it is true that some of them have not yet been sufficiently developed to yield more economical transportation results than do the railways, this can not be said of the 1,150-mile stretch of the Mississippi River between St. Louis and New Orleans, which offers enormous capacity and upon which traffic can be carried at much less cost per ton-mile than upon any railway.

There are also the Ohio, the Missouri, and the Illinois Rivers,, which can readily transport many times the volume of their present traffic, and there are other waterways on the eastern seaboard of distinct transportation value.

The Mississippi River is the natural outlet for the products of the Mississippi Valley. A large percentage of the grain and other food products of our country originate in that section. A large proportion of the great flour mills of our country are located in the numerous cities along the Mississippi River. Every pound of this grain and flour which seeks ocean transportation should, at least during war period, be carried by the Mississippi River to New Orleans and from there to its final destination.

In addition to this great volume of tonnage, contracts have been made by our allies, as well as by our own Government, with manufacturers located in the Mississippi Valley for millions of tons of manufactured products, such as guns, ammunition, and other war munitions, machinery, tractors, aeroplanes, auto trucks, railway supplies, and innumerable other articles, all of which must be sent to Europe, and when this enormous tonnage begins to move in its full volume it will be impossible for the railways to handle it as promptly as it could be handled, and a large proportion of it can and should be sent through the port of New Orleans, which is not at all congested, rather than to attempt to force it upon our Atlantic ports, which even now are almost hopelessly congested.

Our committee believes that the Mississippi River from St. Louis to New Orleans, if put into use, would be of paramount value to our country in the serious crisis which now confronts us, as it offers economical and large capacity for the increase of our transportation facilities during the war, and through its use the traffic can be carried away from the congested areas and the overburdened Atlantic ports and diverted to a Gulf port which is now being used to an extent far below its normal capacity.

For this section of the Mississippi River our recommendation to the Government is that, as a war measure, a fleet of 16 steel towboats and 200 wooden or, if possible, steel barges be constructed of such dimensions and specifications as are suitable to the physical conditions governing this waterway. The barges could, if necessary, be built entirely of wood, it being essential to use steel only for the towboats. If, however, the Government prefers to use steel for all or part of the barges, the necessary steel plates can be obtained from a plant at St. Louis which thus far has not been called upon for such service, so that the steel required for this proposed fleet need not in any way interfere with the construction of the vessels now being built for use upon the ocean.

We have had plans drawn and careful estimates compiled. These show the approximate costs as follows:

Wooden barges, not to exceed 200 feet in length, with a cargo capacity of 1,000 tons each.

Steel towboats, computed at, per boat	$300,000
Wooden barges, computed at, per barge	$42,000
16 towboats and 200 barges, total approximate cost	$13,600,000
Operation:	
Mileage between St. Louis and New Orleans ... miles	1,150
Round trips annually, 16, with six or eight barges to each tow, as circumstances direct, all towboats to be kept moving; barges being left at terminals for following towboat—	
Maximum annual capacity ... tons	3,480,000
Estimated annual gross earnings at present railway traffic rates	$5,000,000 to $7,000,000

We do not claim reliable estimates of the cost of railway equipment, but from information received we have figured locomotives at $50,000 each, box cars $2,000 each, and we have carefully underestimated the railway equipment required for an equal ton-mileage and placed it at 100 locomotives and 12,800 freight cars, costing approximately $30,600,000.

It is important to remember that the construction of railway equipment must directly compete with the manufacture of munitions, and the transportation of raw materials must add to the railway traffic burden, whereas the equipment for the proposed water transportation, if built upon the Mississippi River, can be handled almost entirely by water.

If the Government so desires, we are in a position to offer the services of responsible parties now ready who will undertake to contract for the building of these barges, under the direction of the United States Shipping Board, either of steel or of wood construction, on any equitable terms, with the assurance that within a period of six months from date of contracting a large portion of this fleet would be available for transportation purposes.

The construction of the towboats will, of necessity, be placed in the hands of men expert in that line who are available and who can start on the construction work at an early date.

If the Government should wish to be relieved of such responsibility, the committee representing the three cities of St. Louis, New Orleans, and Memphis is further prepared to organize a company which will invest the necessary capital to undertake the mangagement and operation of this fleet under such terms as the Government may decide.

Modern river terminals are already under construction at St. Louis. Memphis is preparing to add to her facilities, and the necessary terminals can be completed there within the time required for the building of the proposed fleet. New Orleans has already a splendid and complete system of terminals for river and ocean traffic owned and operated by the State of Louisiana.

It is, in our opinion, futile to rely upon private capital, under present abnormal conditions, to revive transportation upon our waterways. In any case private action would move very slowly and carefully, and by its means alone it would be years before water transportation of any great importance would be available.

It is also our opinion that the Government can not consistently discontinue private management and control of the railroads of our country and at the same time insist upon or expect private parties to furnish the capital for the operation of our waterways on a scale sufficiently large to meet our war conditions and necessities, and especially in view of the fact that all of our natural waterways are under the direction and control of the Government.

This is essentially a matter which must be handled by the Federal Government. Only by enormously increased terminals, roadbeds, tracks, and equipment at a fabulous expense can the railways prepare themselves to handle expeditiously the tremendous volume of traffic created by the war. It is extremely doubtful whether they can accomplish this alone. It is our firm belief that the joint use of our rail-and-water possibilities will be the most economic and efficient solution of the transportation problem and that the adoption of the plan suggested will be a potent factor in the winning of the war.

I will say further that I received a telegram this morning from the secretary of our Mississippi Valley Waterways Association, who has just recently been on a visit to the cities on the lower Mississippi River; and he says that they are all very wide awake on this proposition; and they are all of them ready to construct those necessary terminals.

Senator RANSDELL. Provided the fleet is built, they will go ahead and build the terminals?

Mr. SMITH. Yes, sir.

Senator RANSDELL. Mr. Smith, you were a business man in a large way in St. Louis for many years; and I will ask you, what cause the commerce to leave the river? I suppose in your young days there was an immense commerce on the river between St. Louis and New Orleans?

Mr. SMITH. I think Mr. Sanders has covered that point very fully, ›nator Ransdell.

Senator RANSDELL. He covered it to some extent; but I would like › have your opinion also.

Mr. SMITH. The three causes that he mentioned are the prime rea- ›ns for the removal of the traffic from the river. In my opinion, owever, the largest factor was the unfair railroad competition; they ıade it impossible for the boats to continue to operate profitably here.

Senator RANSDELL. They reduced their rates so much to the river oints that the boats could not compete with them?

Mr. SMITH. That is correct. For instance, I have known a rate f 12 cents by rail from St. Louis to Memphis; and a rate of as much › 75 cents to those points where the river did not touch, between t. Louis and Memphis.

Senator RANSDELL. For a shorter mileage?

Mr. SMITH. Yes, sir.

Senator RANSDELL. But to points which were reached only by the ilroads?

Mr. SMITH. Yes, sir.

Senator RANSDELL. And the rate was only 12 cents to Memphis?

Mr. SMITH. Yes, sir.

Senator RANSDELL. Whereas it was 75 cents to the interior points?

Mr. SMITH. Yes, sir; to the interior points.

Senator RANSDELL. You have experienced that in your own busi- ss, have you not?

Mr. SMITH. Yes, sir; and under those conditions it was not pos- le for the boats to operate.

Senator RANSDELL. Of course not; and that applied very gener- y—that condition that you speak of?

Mr. SMITH. Yes, sir; similar cases to that applied throughout › Mississippi River Valley.

Senator RANSDELL. I would like to say in that connection that I d occasion to look up that question some time ago, and I found ıt rates on carload lots on sugar from New Orleans to Poncha- ıla, in the State of Louisiana, on the line of the Illinois Central ıilroad, 48 miles from the city of New Orleans, were 17 cents per ndred; and rate to Cairo, Ill., 555 miles from New Orleans, on the ne railroad, were 17 cents per hundred, in carload lots—or exactly › same rate to carry that sugar 555 miles as to carry it 48 miles; › only difference being that Ponchatoula was in the interior, away ›m the river.

Mr. SMITH. Yes, sir.

Senator RANSDELL. Whereas Cairo was on the river?

Mr. SMITH. Oh, I think there have been any number of cases of ıt kind.

Senator RANSDELL. Your own experience as a business man would l you that there have been a great many cases of that kind?

Mr. SMITH. Yes, sir.

Senator RANSDELL. And that is what drove the boats off the river?

Mr. SMITH. In my opinion, that was the principal cause.

Senator RANSDELL. Now, the Government has taken charge of the ilroads?

Mr. SMITH. Yes, sir.

Senator RANSDELL. And it has met with a great problem in transportation?

Mr. SMITH. Yes, sir.

Senator RANSDELL. The Government owning this one great transportation agency, is it your theory that it ought to own the other transportation agency also, at least for the time being?

Mr. SMITH. Under war conditions, certainly.

Senator RANSDELL. Yes: under war conditions. Well, we will not discuss whether it ought to operate the railroads after the war. But at present, it is operating the railroads, and you think it ought also to provide the transportation on the rivers?

Mr. SMITH. Yes, sir; because they can do it very much better than private capital can. Some one has asked whether there was enough traffic to justify private capital in putting these boats on the river at the present time. I would answer that by saying that, now that the director general of railroads has the power and the privilege of directing the freight, he can divert it, to any extent he desires, from the railroads to the rivers; and that is what should be done, relieving the railroads of all the freight that can be handled by water.

Senator RANSDELL. And that would still leave business enough for all existing railroads, would it not?

Mr. SMITH. It would, indeed; and those routes that traverse sections near the Mississippi River, such as the Illinois Central Railroad—if a lot of their cars were released by handling a large amount of their freight on the river those cars could then be sent to other lines of railroad where they were needed.

The CHAIRMAN. What other lines have you besides the Illinois Central that traverse that section along the Mississsippi?

Mr. SMITH. The Illinois Central traverses the east bank, and the St. Louis, Iron Mountain & Southern, while it does not follow the river, goes from St. Louis to the South.

Senator RANSDELL. That is on the west side of the river?

Mr. SMITH. Yes: on the west side.

Senator HARDING. Do you think the Director General of Railroads would have that authority now, under his present power?

Mr. SMITH. This bill would give him that power, as I understand it.

Senator HARDING. To what bill do you refer?

Mr. SMITH. Senate bill 3385, which provides for the taking over of our railroads and waterways by the Government and their operation by Mr. McAdoo as Director of Transportation.

Senator HARDING. Do you think he has authority to divert traffic by water route, unless there is specific mention of that in the bill?

Mr. SMITH. Well, it is my understanding that he could do that; that is, that he could divert it from one railroad to the other; and in the same way, he could divert it from the railroad to the river, the boats were running on the river.

Senator HARDING. Well, I am only asking for information.

Mr. SMITH. And I am only giving you my opinion on the subject.

Senator HARDING. It is rather inconceivable to me that the Director of Railroads would have the power to say to you or to me that we can not use the railroads: that we will have to use the water transportation.

Mr. SMITH. Well, is there not a clause in this pending bill that vides for his taking over that power?
enator HARDING. I did not know about that.
enator VARDAMAN. Suppose he should determine, for military sons, that it was necessary to land that freight at a certain place, the movement to that place could be facilitated by the use of ernment-owned boats?
he CHAIRMAN. Of course, if the Government owned the barges he ld do that.
enator VARDAMAN. I think that would be a part of the general ver that he has, as war controller of the railroads—or of the ns of transportation.
enator RANSDELL. They have been issuing priority orders and y have been telling people that they can not use the railroads at at certain times. During these war times they do pretty much thing they please. Now, if he is to be our director of transporta- in this country, I take it that he can send the freight by what- r method he deems proper.
enator VARDAMAN. Yes; his powers are almost despotic.
enator RANSDELL. It seems so to me.
enator VARDAMAN (continuing). As to the means of transporta- , it is necessary to give him that power in order to effect the g that has been undertaken.
enator HARDING. Well, I am willing to grant that if he has not t power now he will have it before we get through.
Mr. SMITH. Well, Senator, suppose there was a very large ship- t of any commodity that was wanted to be moved from Pitts- gh to New Orleans, and he would decide that he would send it n the Ohio River rather than by rail, and he would relieve a nendous lot of cars by doing that; would it not be the part of dom to do it?
enator HARDING. I do not think any consignor or consignee ld object, if he could afford the transportation. But let me ask another question: Do you argue that we could get any relief m the situation in 1918 from any of these proposals?
Mr. SMITH. I think, if immediate action was taken, that the num- of barges that it is proposed to build under this plan could be lt in six months.
enator HARDING. Do you have a suggestion for building them hout impairing our productiveness in other lines, such as the duction of ships?
enator RANSDELL. He brought that out rather fully.
enator HARDING. Well, I am sorry I was not present at the time.
Mr. SMITH. Yes; I made a statement as to that.
enator RANSDELL. I would like to say, for your information, ator Harding, that he stated that there was one steel plant in Louis that could turn out the plates for the steel barges that is now being called upon to furnish that material for the Govern- t; and that there are plenty of workmen there on the river who ld build either the steel barges or the wooden barges without rfering with the present steel-ship building program.
enator HARDING. Well, I do not want to interrupt further; but ould like to have you add one statement for my information.

Mr. SMITH. Yes, sir: certainly.

Senator HARDING. Do you know why that steel plant which has been mentioned is not turning out steel now to meet the present emergency?

Mr. SMITH. They have only been making steel plates very recently; they only recently began to roll plates, and they have not yet advised the Government that they were ready to do so, because it was expected that if this plan was carried through it would be a very great advantage to use that steel plant in connection with the building of these barges.

Senator HARDING. I can see that.

Senator RANSDELL. Pardon me again; but he also brought out the fact that it would not be essential to build the barges of steel: that they could get along very well with wooden barges, except as to the towboats themselves.

Mr. SMITH. That is correct.

The CHAIRMAN. What size wooden barges would you suggest?

Mr. SMITH. A wooden barge 200 feet in length, with a capacity of 1,400 tons. Now, a steel barge, being lighter, can be built to operate on the lower Mississippi that will carry, at a certain stage of the water, up to 3,000 tons.

The CHAIRMAN. You never worked out any plan for self-propelling barges, did you?

Mr. SMITH. Yes, sir.

The CHAIRMAN. Your plan contemplates towboats, does it not?

Mr. SMITH. It is the opinion, Mr. Chairman, of most of the river men that the tow and barge system is very much better: that is, it is a more practical thing for that river than the self-propelled barge.

The CHAIRMAN. Do you remember the history of Mr. Bernhard's boat?

Mr. SMITH. Yes, sir; I think Mr. Bernhard's boat was all right, except that I think he did not have sufficient power, and, of course, you know the utter impossibility of making any line pay that runs only one boat; the service is not sufficiently frequent.

The CHAIRMAN. He only had one barge, did he?

Mr. SMITH. Yes, sir: he only had one barge.

Senator VARDAMAN. What was the capacity of that barge?

Mr. SANDERS. About a thousand tons.

Mr. SMITH. It was not very large, and it was not possible to operate it profitably for those reasons.

The CHAIRMAN. If the Government goes into this proposition now—you say that private enterprise will not go into it—and the present emergency conditions cease, as I hope they will before very long—will not that be the end of private enterprise going into the matter at all?

Mr. SMITH. My idea, as a business man, is that just as soon as you revive traffic on the Mississippi River and get the people back to using the river, and it is demonstrated to them that it can be done, it will be done: and it will be very easy for the Government to dispose of that equipment to private parties after the emergency is over: and, of course, we are hoping that the lessons that will be learned from the war, as to the use of the river in connection with the railroads, will help to bring about the necessary legislation to

protect those river lines in the future, as they have not been protected in the past, against the unfair competition from the railroads. That will help in the solution of the problem. That river and a number of our other rivers must be used sooner or later, because we will have the same experience as they have had in Europe—as our country develops and the volume of such business becomes greater.

Senator RANSDELL. Are you referring to the marvelous commerce of Germany that is carried on the rivers and canals?

Mr. SMITH. The rivers and waterways and canals, etc., that they have are carrying to-day all of the heavy products, such as building and other raw materials, and the railroads are carrying all finished products.

Senator RANSDELL. Germany has utilized its waterways to the fullest degree, has it not?

Mr. SMITH. Germany, Belgium, Holland, France, and all those countries have utilized them.

Senator VARDAMAN. Those are cases of government ownership, however, are they not?

Mr. SMITH. Not entirely, but largely so. But even since the war Germany has increased her water facilities enormously.

Senator VARDAMAN. But she did that as a Government and not by private individuals?

Mr. SMITH. Yes, sir.

Senator RANSDELL. Mr. Smith, is it not a fact that there are no Government-owned boats on those waterways; that they are Government-controlled, but they are not owned by the Government?

Mr. SMITH. That is true. I think now, during the war, they are Government-operated; but I think most of the operations in Germany and Holland have been by privately owned boats.

Senator RANSDELL. That is my information. I am not absolutely positive; I know the Government owns many of the railroads in Germany, but I do not think it owns the boats.

Mr. SMITH. I think you will find the Government has taken over practically all the equipment during the war.

Senator RANSDELL. The Government owns the railroads and it directs certain traffic on the waterways, but the private people own the boats, as I understand?

Mr. SMITH. To a large extent.

Senator RANSDELL. Mr. Smith, could you tell the committee about how the cost of steel boats would compare with the cost of wooden boats? Is there any material difference?

Mr. SMITH. It is hard to tell now. I think, at the price the Government is now paying for steel, the barges would cost——

Mr. SANDERS (interposing). Nearly double.

Mr. SMITH. I do not think quite double, but they would cost very much more. They are very much better than the wooden barges, of course.

Senator RANSDELL. They would last longer, would they not?

Mr. SMITH. They would last longer, and the item of insurance alone would make them more economical.

Senator RANSDELL. It is decidedly more advisable to build the steel barges if we can get the material, undoubtedly; but if we can not——

Mr. SMITH (interposing). If we can not, we will have to do the other thing.

Senator RANSDELL. And we have used the wooden boats fo long time?

Mr. SMITH. Yes, sir.

Senator RANSDELL. You have spoken about the lower Mississ River from St. Louis down. What do you think of the possibil for commerce on the upper Mississippi, from St. Louis to St. I and Minneapolis?

Mr. SMITH. I think that the possibilities are large. The deci to build that fleet of 24 steam barges and 4 tow boats was brou about largely through the efforts of Mr. Goltra, who is presiden the Mississippi Valley Iron Co., and who, of course, was trying find a means of having the Mesaba ores brought down to his naces, and when the proposition was put up that coal could be ried from St. Louis to Minneapolis and furnished to the Northwe I think you are all familiar with the very acute situation they l had up there for the last two or three years on account of the sh age of coal——

Senator RANSDELL. Yes.

Mr. SMITH. That, of course, can be a continual movement.

Senator RANSDELL. Up the river?

Mr. SMITH. It can be continually moving up the river, and during the summer they will ship coal up there and store it winter use; and Mr. Goltra will use the greater part of all the which he can bring down, and there are also other interests will want it.

Senator RANSDELL. Is not your coal in Illinois very close to Louis?

Mr. SMITH. Yes; it is within anywhere from 6 to 50 miles.

Senator RANSDELL. So you would have very cheap coal for iron works established at St. Louis?

Mr. SMITH. Yes, sir.

Senator RANSDELL. Did you not say a while ago that you c get the ore from the Mesaba iron range to the city of St. Paul as cheap as you could get it from that same range to the cit Duluth?

Mr. SMITH. The rate, as I am informed, is exactly the same.

Senator RANSDELL. And could you not get it from St. Paul d to St. Louis practically as cheap as from Duluth to Pittsburgh, or to Buffalo and those points where it is now manufactured?

Mr. SMITH. Under those conditions the Mesaba ore can be down in St. Louis at about—I do not say this is absolutely cor but I know it is nearly so—75 cents a ton less than it is deliv to-day in Pittsburgh.

Senator RANSDELL. You do not say so?

Mr. SMITH. Yes.

Senator RANSDELL. Actually cheaper?

Mr. SMITH. Yes.

Senator VARDAMAN. What does it cost?

Mr. SMITH. I think—I am not sure about that—that the rate cents to St. Paul or Duluth.

Senator RANSDELL. Mr. Smith, if that be true—and I am sure are correct—do you see any reason why there should not be i manufacturing plants not only at St. Louis, but all the way d the river as far as New Orleans?

Mr. SMITH. With water transportation to bring that ore to Mississippi River plants, wherever they may be located, it will give them really a tremendous advantage, and they can make their own iron and steel. That is one of the great possibilities of that upper river.

Senator RANSDELL. I thought so. And that might be extended as far south as New Orleans?

Mr. SMITH. Certainly.

Senator RANSDELL. We have spoken about the upper Mississippi. What about the Missouri River?

Mr. SMITH. The Missouri River is being navigated, and the parties in Kansas City who organized that company and who have continued to operate it, I think, deserve the greatest credit of any body of men who have ever undertaken to do anything of that kind. The channel is not so dependable as either the lower or upper Mississippi, and is not as deep; but in certain seasons of the year they ind it profitable, but they lose during the low-water periods what hey make during that period when the stage of the water is right.

Senator VARDAMAN. Some parts of the Missouri River are navi-;able all the year around?

Mr. SMITH. It is practically navigable, but, of course, when the rinter comes on they can not navigate. This year the upper Mississippi and the Missouri have been lower than for many years on ccount of the lack of rains, but ordinarily they do not operate their oats during the winter season.

Senator VARDAMAN. What is the depth of the channel between St. Louis and Kansas City?

Mr. SMITH. It gets down as low as 36 inches in very low stages of water. It is usually, I should say, about 4½ to 5 feet.

Senator VARDAMAN. Is it possible to deepen that channel?

Mr. SMITH. Oh, certainly. The channel can be very much improved.

Senator VARDAMAN. I have seen a great deal of it, and it looks to me like there is scattered along a good deal of sand.

Mr. SMITH. There is a deposit of silt.

Senator VARDAMAN. And, I thought, from its appearance in passing on the train, that it would be rather difficult to build a channel hat would hold and scour itself out.

Mr. SMITH. The engineers say it can be done, and they have an appropriation for doing it, and they are gradually improving the annel.

Senator VARDAMAN. I know they have an appropriation.

Mr. SMITH. They are gradually improving it. It is a more difficult stream to navigate than the Mississippi.

Senator HARDING. What do you think about the Government taking over all the waterways and operating them?

Mr. SMITH. Well, I am not sure they would want to do it. I think would be a great relief to the country if they did it. I think it ould be a great advantage to the country.

Senator RANSDELL. It has taken over the oceans, has it not?

Mr. SMITH. Yes. There is no question in my mind, Senator, looking at it from a business standpoint, that there is no greater thing hich can be done for this country than to have a general use of all ur navigable rivers. It would solve our transportation problem, as could be solved in no other way.

Senator VARDAMAN. You think it would be prudent for the Government to take over the waterways if it is going to operate the railroads?

Mr. SMITH. Certainly they should do it in that event, without any question.

Senator VARDAMAN. Do you think that the Government ought to take over the railroads and waterways both in time of peace?

Mr. SMITH. I am not so sure, Senator, that it is wise to take over the railroads. I have not studied that question, as some of you gentlemen probably have, but I doubt the wisdom of taking over the railroads in time of peace.

Senator RANSDELL. The Government owns the roadbed of all these waterways?

Mr. SMITH. Of course, they own all of the natural waterways of the country; they are under Government jurisdiction and control, as I have stated.

Senator RANSDELL. You brought that out in your first statement.

Mr. SMITH. Yes. I made that point there, Senator.

Senator HARDING. You do not need to go over it again.

Mr. SMITH (reading). "It is also our opinion that the Government can not consistently discontinue private management and control of the railroads of our country and at the same time insist upon or expect private parties to furnish the capital for the operation of our waterways on a scale sufficiently large to meet our war conditions and necessities, and especially in view of the fact that all of our natural waterways are under the direction and control of the Government."

Senator HARDING. I asked you the question. I think if we are going to have continuous Government control of the railways this waterway promotion is the obvious thing, I mean, for times of peace. I am unable to agree with you that we will get any substantial help out of any possible expenditure for the war. I think the war will be over before we can contribute anything along that line.

Mr. SMITH. That depends on the duration of the war.

Senator VARDAMAN. Thank God for that optimistic view; I hope so.

Mr. SMITH. Of course, if the war should last two or three years, which is not at all improbable, the use of our important waterways is imperative.

Senator VARDAMAN. Then every established Government in the earth will be prostrated with the possible exception of Japan.

Senator HARDING. I will answer that question. You have estimated the duration of the war as two or three years. By that time the world will be so completely broken up that you could not even build a canoe to go up the Mississippi River and pay for it out of Government funds.

Mr. SMITH. I certainly hope and pray it will not last that long.

Senator HARDING. I am not sure that your version on the big question is correct.

Senator RANSDELL. You mean the utilization of these waterways.

Senator HARDING. I am thinking of our present emergency. Another question which I asked also and the gentleman who preceded you—I have no information on the subject, except when the coal situation began to get acute I received a number of telegrams from

eople whom I assume knew what they were writing about—stating here were tied up in various places along the Ohio and Kanawa Rivers hundreds of coal barges which were previously employed in he transportation of coal. The inference was that they had been ide up through the machinations of the railroads for the purpose of aking them out of competition, which probably is true. I have been vondering, since your proposition has come up, if it would not be a easible thing to give a practicable illustration of this resumption of raffic by getting authority to bring out these barges and put them nto the service.

Senator RANSDELL. The Director of Railways can do that, as I nderstand it, just as he can utilize the railroads. I believe he has ie power under that bill.

Senator HARDING. He can pretty near seize anything.

Senator RANSDELL. He will have the power under this bill if it ecomes a law.

Senator HARDING. It looks to me as if that were a feasible thing to), to get hold of these barges.

Senator RANSDELL. And anywhere else, Senator, where he can find ailable ones.

Senator HARDING. Yes. That does not trespass on anything pro- ding facilities for war transportation. There are certainly sufficient ver tugs and river steamers to handle these tows. Let us have a actical illustration of the resumption of water traffic.

Senator RANSDELL. They are all obsolete, Senator Harding. We int to utilize them, but we want also to build some which are up to ite.

Mr. SMITH. A large percentage of those barges and towboats which ou speak of are really obsolete. They are old, worn-out craft. They not carry enough tonnage to make it worth while to operate them. hey are not at all modern; they are obsolete. That expresses it.

Senator HARDING. They tell me there are barges that have been rmerly used in fleets of 25. That means a great lot of coal.

Mr. SMITH. Yes. They are very small boats.

Senator HARDING. Of course, there are a good many of them that ere in existence 30 days ago that are never going to be seen any ore. The ice has wrought unspeakable havoc on the Ohio River, t only with large river steamers but scows of all kinds have been ept away.

Mr. SMITH. A majority of the packet and passenger boats and ats used generally on the Mississippi, at least a number of them, re sent, for instance, into the Tennessee River to keep them safely ough the winter, and even those boats have all been destroyed. I nk I am safe in saying that a large proportion of the equipment t has been in use during the past year on the Mississippi has been troyed by the ice in the past few months.

Senator HARDING. That is a story to make the Kaiser jealous of U boat.

Senator RANSDELL. I want to ask you, Mr. Smith, in c on h your plans for barges, if you have considered at all t concrete barges for the river use?

Mr. SMITH. Yes, sir; we have had that investigated. W ood deal of inquiry made about it, and I think it is

opinion of the Army engineers, at least, that they are not suitable for use on the Mississippi River. They have their reasons for it. There is a loss in draft; that is one of the reasons given.

Senator RANSDELL. I was afraid they were a little bit heavy and would sink down too deep in the water.

Mr. SMITH. They are an experiment as yet. They may come to be practicable, but I would doubt the wisdom of building any large number of them at the present time.

Senator RANSDELL. We are very much obliged to you.

Mr. SMITH. I thank the committee.

(Thereupon, at 3.45 o'clock, the committee proceeded to the consideration of executive business, and at 4.15 o'clock p. m. adjourned, subject to the call of the chairman.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

WEDNESDAY, FEBRUARY 20, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to call, at 2 o'clock p. m. in the com-
ittee room, Capitol, Senator Duncan U. Fletcher presiding.
Present: Senators Fletcher (chairman), Sheppard, Vardaman,
artin, Bankhead, Nelson, Jones, Calder, and Johnson.
The CHAIRMAN. If the committee is ready, we can hear Mr. Allyn
ow.
Mr. Allyn, will you state your name and address?

STATEMENT OF MR. RUBE ALLYN, OF HOG ISLAND, PA.

Mr. ALLYN. My name is Rube Allyn; my residence is Sarasota,
a.
The CHAIRMAN. What is your present occupation, Mr. Allyn?
Mr. ALLYN. My present occupation is that of a dock builder.
The CHAIRMAN. With what company are you employed?
Mr. ALLYN. I am employed by the Raymond Concrete Pile Co., at
og Island.
The CHAIRMAN. How long have you been engaged there, Mr.
llyn?
Mr. ALLYN. I passed through Washington the day after Thanks-
ving, and the following day, two days after Thanksgiving, I began
ere. I do not remember the exact date, but it was about two days
ter Thanksgiving.
The CHAIRMAN. What is that company engaged in doing at Hog
land?
Mr. ALLYN. They have a contract to put in a number of shipbuild-
g ways. They, of all the companies, are the one company building
ncrete ways; and they also, of course, have a contract for a pier, on
hich we are working; and, of course, when those ways get near the
ver the pile driving, etc., is done; we have the complete contract
r those ways.
The CHAIRMAN. How many ways are there?
Mr. ALLYN. I am not familiar with the affairs of the company,
ing merely a workingman. They have about 10 ways.
The CHAIRMAN. About 10?
Mr. ALLYN. I believe 10 is the correct number.
The CHAIRMAN. On what portion of the plant are their ways being
nstructed?

Mr. ALLYN. Near the southern extremity. The sections are lettere with the letters A, B, and C. Our section is section B. It is on sec tion A that the first keel is now laid, and we expect to be one of th earliest to have ways ready for laying the keel. There is som little rivalry in that respect, which is very good for the Government

The CHAIRMAN. How far has the work progressed on section A How many ways have they got finished?

Mr. ALLYN. That I can not say. There are practically no ways absolutely finished, but they have one way on which they have commenced to build a ship, which is sufficiently near completion to enable them to go on with the shipbuilding. What details they have to complete on that I do not know. Others are nearing completion in several sections. Section C, adjoining ours, is just as far advanced, practically, as ours is.

The CHAIRMAN. How many men are associated in the work that you are engaged in there at Hog Island?

Mr. ALLYN. The number varies very considerably from time to time. One of the matters that should be recognized with reference to labor there is that the men have not a position; they have merely a job from day to day. Whenever the work could possibly be pressed, there have been a great many men put on; just as many as could be obtained.

At other times, during periods of cold weather, such as we had this winter, at times practically all but the Americans—all the Jews left; the Irish and the Americans remained on the job. [Laughter.] I do not know just how many, but there were a good many. I did not miss a day myself, because I felt that I could not afford to let the reputation of Florida fall down.

The CHAIRMAN. Mr. Allyn, have you been pretty well acquainte with the situation at Hog Island, as to the number of men employed how they are employed, the work that they did, how they were paid how they were taken care of, how they lived, and how they wer transported to and from the island?

Mr. ALLYN. Mr. Chairman, I am not in a position to give any de tailed information with reference to the management of the affa or the number of men employed on the whole plant. I have n sources of information, from the administrative viewpoint, wha ever. I am thoroughly informed as to the conditions of labor, an as to the difficulties of transportation.

The many trials and tribulations that we have gone through, giv ing birth to this thing, so far as it has gone—those I know abou Of course, we are a world apart, as you will understand, in th immense undertaking. There has been no attempt, or no successfu attempt, that I know of, to coordinate labor—I mean, to make labo familiar with its obligations there, and its responsibilities, and a of those things—so that I thought I might be of some little servic to the committee in telling about them.

The CHAIRMAN. Well, will you please tell us about them; giv the committee all the information you can upon that subject, in you own way.

Mr. ALLYN. Thank you, sir. I may say in the beginning that am officially known as a dock builder; but I may have to do any on of 50 different things that have really no connection with a dock a

all. But a dock builder is a man who can use a crosscut saw, an ax, an adz, brace and bit, and so on: and is not afraid to go into the mud or to go up in the pile driver, when he is told to, or do anything else that requires a little bit of endurance and courage: and a man who has a good eye and is fairly skillful with ordinary tools, that a man might have to use in the woods or on the farm.

Senator VARDAMAN. Now, will you answer the chairman's question in your own way, Mr. Allyn?

Mr. ALLYN. Mr. Chairman, the labor problem at Hog Island from my viewpoint—and I am speaking from the viewpoint of a patriotic American, one of many thousands of Americans who have given up their ordinary avocations, or whatever positions they have attained that might release them from hard labor in life, in order to serve their country in some way—the labor problem is as follows:

Of course, like most of those who are working at Hog Island, I am too old to be a soldier; my children are not old enough, except my daughter, who is studying in New York to be a Red Cross nurse. She is 19 years old—the youngest one there. And so I went there to work, in response to advertisements saying that it was the patriotic duty of Americans who were strong in body and possessed of some mechanical ability, and who were willing to come and help—that it was their duty to come and help. Like most men of family, with a feeling of responsibility toward the country, I felt that it would be a nice thing, when this great world war was over, if, in future years, my descendants, like the descendants of others, could be able to say that their father, or their grandfather, or whatever it might be, had done his duty during this war.

I found when I arrived at Hog Island no difficulty in getting employment. Nor have I any complaints whatever to make with the conditions of employment. As far as I am concerned the pay has been satisfactory. I have not been robbed or cheated. I receive my pay promptly.

With regard to the food—well, I have lived the life as it was there; I have slept in the barracks, which have been improved from time to time, until now the conditions are very good. The food has been execrable on occasions, on other occasions it has not been bad at all. We have to thank this committee, or Congress, for one great thing which you have done for us: For two or three months there we did not know the taste of sugar, and now we can detect the taste of sugar in our coffee, and can almost detect the taste of coffee in——

Senator VARDAMAN (interposing). In the water?

Mr. ALLYN. In the water; yes, sir. And we have to thank Congress for that. However, I am not particularly anxious to waste the time of the committee with these trivial complaints, because we realize that the country is at war, and we are willing to stand anything that anybody else can stand. We dislike to have to go into Philadelphiha and find in the cheap restaurants there that they have those luxuries, when we are denied them. So those things have caused a little friction out at Hog Island.

But I think that the greatest offense that American labor feels in connection with its work in the semigovernmental institutions is due to the fact that they are overrun with Russian Jews speaking

the German language—overrun to such an extent that he feels that his life is in absolute danger of being smothered by them in the cars going to and from his work—and he has to run over them when he is going to his work and be abused in a language which he does not understand and which he thinks might be something terrible, because he may detect a few words of German in the abuse that he receives from those people.

Senator NELSON. What are those people to whom you refer doing there?

Mr. ALLYN. They are standing around talking about when the next baby is due [laughter]; you know they have a theory that if they do not do much work but raise all the children they can they will be doing their share toward winning this war. [Laughter.] It is a kind of Bolshevik way of treating the war under somewhat different circumstances.

For instance, a few days ago, coming up from section B, when the first keel was laid, the following incident occurred: It was naturally an important event—the laying of that keel—and we had been speaking of it. A great big husky fellow who was working on my job, an Irishman who was Americanized, said to me, "They killed three fellows there yesterday; there was a cable that cut two of them right in two; and another poor fellow got hit with a plate that fell down on him." He said, "That is what happened yesterday; those men were killed."

I said to him, "Do you know that to be a fact or did you just hear it?" He said, "Well, I know that the fellow who told me would not lie to me." Pretty soon everybody in the gang had heard the story; in fact, it was passed around over the whole island, and I asked the foreman to excuse me, as I wanted to go to where the accident occurred and see the bloodstains.

I went down to where they said the men had been killed and asked if there had been any accident down there, and the men looked at me and wondered what business I had off of my job. There had not been the sign of an accident to any of the men; nothing of that kind had happened.

I am convinced, because of the frequency of occurrences like that, that those foreigners, with their German sympathies, spread those stories as the result of Bolshevik tricks, or at least the kind of tricks that the Kaiser put over on the Bolshevik, and that they are intended to discourage labor.

And that class of labor to which I refer on the whole has the theory that the less you work the longer the job will last.

Now, the Americans resent the fact that those fellows are allowed to stand around in that way, and that is very discouraging to American labor. But I want to say, to the credit of the corporation, that before the present investigation commenced—it may have cast its shadow before—but they disappeared.

Senator NELSON. The Jews disappeared?

Mr. ALLYN. The Jews disappeared; there was a migration of the Jews; I do not know whether they got across the Jordan or not; but if so, I hope the waters closed on them. But they disappeared largely until now we can hear the English language spoken on the works, and that is a great relief to us.

Senator VARDAMAN. Well, what were the superintendents, the ›verseers, and the directors of the work doing when those men were ıot performing their work at Hog Island? Was there nobody there o see that the work was done?

Mr. ALLYN. Well, sir, I wanted you to ask that question, and I ıope that I can make you see and appreciate the answer to it.

A Jew explained that to me one day, telling why he thought Germany was a better country to work in than the United States.

Senator NELSON. Yes; you may proceed.

Mr. ALLYN. We were down close to the water together, working ›n a crosscut saw, he on one end and I on the other. He was a little ›it of a fellow, and he was congratulating me on the fact that I had ıtood the cold weather so well, coming, as I did, from the South, vhile he had to lay off every little while on account of sickness. Well, I was interested in him, and I was working the saw too hard to ›lease him. He said: "Do not work as hard as that; that is foolshness." He said: "I made just as much money as I am making ıow when I worked for the Germans in Russia or in the Balkan States." You know that the Germans are employing those men here, and this Jew said to me: "I tell you what we did there. If we ad to pick up something, we did not reach down and pick it up ke you Yankees would; you just grab it and pick it up like ıis" [indicating]. "We just stooped down like this" [indicating], and we picked it up like this" [indicating], "and sometimes it ould take us five minutes to pick up something. And we got just ; much wages for that." And he said to me: "You know you can ›t call a man down when he is moving; he is working, no matter ›w slow he works." You see, it is just like the question as to when man is drunk. Some people say that he is drunk if he has any cohol in him at all, and others say he is not drunk as long as he n walk around.

Now, that is the way those people act, and that is the way they lk. And that is the reason they had to have so many bosses; those ople have to be very carefully checked up; in fact, it was annoying the Americans to have so many bosses around pushing those Jews ›ng. Of course there were a great many of the men, the Amerins, that did not need that constant supervision. But when those ws were there they had to have a very large number of inspectors ying to get work out of them, and when they left, of course, there ›re too many inspectors for the other people, and a great many of ose inspectors lost their jobs, too.

Senator VARDAMAN. How long have you been there at Hog Island?

Mr. ALLYN. I have been there since November.

Senator VARDAMAN. And have the men been steadily employed ere all the time? Has there been no loafing on the jobs when they ›re receiving pay?

Mr. ALLYN. No, sir; they have guards there to watch them. There s been a certain amount of loafing necessary. It is a problem that would like to have you gentlemen understand. There has been afing, of course. In employing 20,000 or 30,000 men you can not pect to have them all doing their duty all the time, of course.

But when I first went there there was a good deal of confusion; ings seemed to be in a disorganized state. There were repetitions

that were unnecessary. But I saw a gradual improvement all the time and was very pleased to notice it.

For instance, the guards had instructions, if they found a man loafing, to take him up and arrest him; but as winter came on the tendency was to get away to somewhere where there was a fire. They have a close checking-up system there, and really a lot of money had to be spent in order to keep those loafers on their job.

And I feel that the corporation may be unnecessarily criticized about those conditions. There in Philadelphia, where some of us have to go sometimes for what little recreation we can find in the City of Brotherly Love, we find that if we mention the fact that we work out at Hog Island when we go into a decent restaurant—well, there will be nothing said about it to us, but we are made to feel that we are not exactly in polite society.

Senator VARDAMAN. Do you mean out at Hog Island?

Mr. ALLYN. No; in Philadelphia, the city where all the money is being spent—that is, all the money that you hear about that we are getting. In other words, we are nearly losing our character because it is regarded as a rather shameful place for us to wrok in now. But we are hoping that something can be done so that we will not be regarded in that light by the people. And the main idea that I had in coming here was that I would like to ask you gentlemen to consider the duty that I and my fellow workmen are performing there. When I get back I expect the secretary of the Y. M. C. A. to call a meeting so that I can talk to the men and tell them that they really have in the Congress of the United States men who are their friends; in other words, I want to tell you that the labor at Hog Island is not attempting to organize and has not felt any need of organizing or starting any strikes or anything of that kind.

But of late there is a certain amount of loss of morale, which is a big thing in any working force, just as it is a big thing in an army. Senator Nelson, who has handled lumbermen in the Northwest, knows that; that is a good, big problem in handling workmen.

And no doubt the chairman of this committee knows that also.

The idea that I had was this: The question of the standing of those workmen will come up when the men meet together. Some of them will say to me—they do so very frequently—"Are we working for the Government or are we working for this contractor?" Now they have posted cards around, with the statement printed in big red letters, that those men are doing their bit for their country, and that it is a patriotic work; that that work that they are doing now will be the most valuable for our country that the men will ever have an opportunity to do. Now, of course, that is very stimulating to our patriotism. But, then, as a matter of fact, we find that we have no standing as patriots whatever.

In the first place, suppose you compare the soldier who is serving in the Army with the man who is serving in any of our navy yards or shipyards as a workman. If the soldier dies of illness—pneumonia or anything of that kind—or is killed in battle, or if he is injured, he is called a hero; if he is killed, he is carried off to his grave with military honors, and the reveille is played, and there is a firing squad that salutes him, and the flag is draped on his coffin; and his family [illegible] that he died serving his country in active warfare.

ut look at the other picture: One of my fellow workmen the
r morning was carried to the little shack where he was staying.
head all crushed in. A crane was carrying a big 12 by 12 timber
r the place where he and others were working: the timber fell
all of them managed to get out of the way except him, and he
hurt. Now, that is not an uncommon thing. I do not know
ther he is dead or not, and perhaps I will never know. But I
w that he had to go to the hospital, at least very badly injured.
, assuming that that man had a family dependent on him, a wife
little children, there is no provision at all by which they can be
ported during his illness or after his death: if he should die, they
ld have no provision. His family would not have even the poor
sfaction of knowing that he died in the service of his country:
ple would not speak of him as a hero.

believe for these reasons that it is extremely important, in order
reserve the morale of labor that is employed in these shipyards,
it may be dignified in some such way. A man will do ten times
nuch for his country if he has some insignia that he can wear
ving that he is in the service of his country.

enator VARDAMAN. Would it be your idea to bring that condition
it by enlisting that labor in the service of the country, or con-
ting that class of labor, or something of that kind?

r. ALLYN. I firmly believe that will be absolutely necessary before
; that it will be necessary to organize your labor just as you have
nized your Army. I believe that if that is not done there must
it least, some way of rewarding labor, not only with money or
wages, but there must be some way of identifying or recogniz-
the kind of labor that the Government needs in this emergency
using or applying the word "patriotic" in connection with it. I
ve that is necessary to make the laboring man feel that he is a
iot; otherwise it is simply a question of what you pay him in
ey. According to the way you treat him, you either make that
ingman a patriot or else he is a mere mercenary—either one or
other—you can not possibly combine the two under the present
itions. One of the difficulties with regard to the alleged want
yalty of labor, I believe, is due to that cause. There is a little
uflage there——

nator VARDAMAN (interposing). Aside from that particular con-
n you have mentioned, you say that things are being fairly well
ucted at Hog Island now, according to your judgment?

r. ALLYN. Yes, sir: things are being fairly well conducted. The
sportation conditions have been execrable: our lives have been
anger, of course, more in coming to and going from work,
igh this cold weather, than they have been at work, practically,
use we have had to climb over each other in something like
pens to try to get aboard a boat: and the boat would have
or three times as many people as the law allowed: but
d not sink, so it was all right. [Laughter.] If it had sunk it
d have been a terrible thing. But many times, those who have
a little more wisdom, have gone out on deck and taken the cold
and sometimes they would make bets as to which boat would sink

nator CALDER. What is your trade, Mr. Allyn?

Mr. ALLYN. I am employed as a dock builder at Hog Island. I was formerly a publisher.

Senator CALDER. As a dock builder, do you actually perform manual labor?

Mr. ALLYN. Yes, sir; I am actually working down in the mud.

Senator CALDER. What wages does that trade pay you?

Mr. ALLYN. It pays me 60 cents an hour; all skilled labor is paid 60 cents an hour.

Senator CALDER. How many hours a day do you work?

Mr. ALLYN. Eight hours is a regular day's work.

Senator CALDER. Did you work more than eight hours a day there?

Mr. ALLYN. If you work more than eight hours you are paid extra.

Senator CALDER. Well, what was the practice as to the number of hours you worked at Hog Island this winter?

Mr. ALLYN. The practice was for us to come to work at 7 o'clock in the morning. The regular hours were from 8 to 4.30 o'clock; that was the eight-hour period: if you arrived at work at 7 o'clock promptly you were allowed two hours for that first hour; and after 4.30 o'clock, between that and 5.30 o'clock, was extra time.

Senator CALDER. Did most of the men have extra hours as a rule?

Mr. ALLYN. There was half an hour allowed for dinner, so that that allowed 11½ hours a day, practically, full time. You see it took four hours to get to and from Philadelphia every day: if you lived at Philadelphia you would have to get up at 4 or half past 4 o'clock in the morning, depending upon where you lived, in order to arrive at Hog Island at 7 o'clock.

The CHAIRMAN. Why did it take such a long time?

Mr. ALLYN. Because of the transportation system.

The CHAIRMAN. How many miles is it from Philadelphia to Hog Island?

Mr. ALLYN. Twelve miles.

The CHAIRMAN. And you say that it takes 2½ or 3 hours to go that 12 miles?

Mr. ALLYN. Well, I will give you an instance of how the time was spent; I will take my own case: I have a bed at the Friendly Inn there in Philadelphia, a semicharitable institution established by John Wanamaker, a very nice kind of place for workingmen; and I can get a street car within one block of where I live, which ordinarily would transfer me to a car going to Hog Island, and I ought to get there in 35 or 40 minutes at the outside, or at least within a walk of 1 mile after I got there.

But when I transfer from that car I find that there are a good many other car lines leading in there, and only one, which is called the "Chester Short Line," going out of there. Consequently, we will find 2,000 or 3,000 men there, perhaps, waiting to get on that very limited number of cars. Now, those who need the money the worst, those who feel that the loss of that hour or two hours will mean a great deal to them, will be the ones to fight the hardest to get on those cars. Consequently those Jews were scrambling all over that car just the minute it landed [laughter]. And I myself got arrested for attempted murder one day in trying to turn a few of them off the car to make room for me—because those Russian Jews are only about this high [indicating], and they cry when you touch them. And

it is all that your life is worth to try to get into one of those cars: you have to exercise brute force, and every other kind of persuasion in order to get in those cars. The crowds there have been simply outrageous, and in the cold winter weather of the last few months the conditions have been very bad: there has never been anything like it. I have been up in Minnesota for many years, as Senator Nelson can tell you: and while we have weather there that is very cold, it will not kill you if you keep busy, but this last winter weather up there at Hog Island would kill almost anything.

The CHAIRMAN. Did you have such an experience as you have described every day?

Mr. ALLYN. Not every day, but nearly every day—until they discharged those Jews, 15,000 or 20,000 of them: and then you could get into Hog Island in about an hour and a half.

Senator NELSON. Have they discharged that many men since you first went there?

Mr. ALLYN. I have missed that many: I have no statistics on the subject.

Senator NELSON. Where did they get those men from?

Mr. ALLYN. I presume they got them from the labor employment agencies in New York and Philadelphia: from the slums of those big cities, which are almost altogether recruited from the bol-sheviki of Russia and other similar places.

The CHAIRMAN. Were those people acquainted with that kind of work before they went there?

Mr. ALLYN. No, they never were acquainted with labor of any kind [laughter]:—at least, such labor as an American would perform: if they ever were acquainted with it they did not introduce it to their friends in this country. They did not act as if they had any acquantanceship with labor whatever—except through their mouths: they could talk about it and explain it very skillfully.

The CHAIRMAN. How did they actually do the work? Did they give efficient service out at the plant?

Mr. ALLYN. No: they had to keep a large number of foremen to try to keep those people moving all the time. The idea of those people was to do as little work as possible and to retard the work when they could. I personally believe that that was due not merely to laziness, because it was easier to work in that cold weather than to be idle and nearly freeze to death. But those Russian Jews would put everything that they could wear on them, from a feather bed to a fur coat, if they could buy one, and then they could stand cold weather that an ordinary workman could not stand with the clothes that he had on: he must either work or freeze.

Senator BANKHEAD. Well, those people could not work with all those clothes on, could they?

Mr. ALLYN. No: but one of those men could keep his legs moving, and he could not be arrested for doing nothing, as he could claim that he was laboring when he was moving.

The CHAIRMAN. Do you thing there was really a purpose on their part to retard the work?

Mr. ALLYN. I believe so, Mr. Chairman. While they are an ignorant class of people, I firmly believe that to be the case. I was employed there for a time as night watchman in our place, taking

charge of the place, looking after the materials and everything, and I had occasion to watch them very closely; and as I had had occasion to learn a little German at one time from a lady friend I would listen to those people very closely; and as a result I am convinced that the language they spoke among themselves was vastly different from the whining patriotism that they doled out to us Americans. I am convinced, from things that I have heard when I have made trips in the city, that those people are disloyal. One experience I had a few days ago made me feel that I would like to have the authority to kill somebody. There was a big fellow in a semi-public institution—a very pleasant, cheerful fellow, you know: one of those very nice gentlemanly sort of men, whom the laboring men patronize a good deal. Somebody in the place mentioned the war. Well, he did not say much at all: he just gave one of those contemptuous smiles, and wanted us to believe that the rich man was making the laboring man fight in this war, so that the rich man could become richer: it was that same kind of propaganda which is being carried on by disloyal people in this country, which is very much more dangerous than the loud-sounding stuff that we can refute.

But all through that foreign class of labor, they do believe in their hearts that the war is for no other purpose than to make the poor fight for the benefit of the rich. They brought those ideas with them when they came here. They are dangerous in every way, and ought not to be associated with any public work. We American workmen have acquired a hatred for them. I frankly acknowledge that I detest them.

Senator NELSON. Who employed that class of workmen that you say are worthless?

Mr. ALLYN. My idea is that they were employed when that work was first begun; and labor is scarce; so it may have been thought that it would be impossible to get enough labor to carry on this work. This is an immense enterprise, gentlemen; you have no idea of the immensity of that thing; and you must acknowledge that those people who attempted to organize this enormous undertaking, without previous experience of that kind, would naturally worry about the possibility of getting enough labor to keep things moving there. And my idea is that they applied to the employment agencies in New York and other large cities, to get that labor; and that that is where this particular class of labor was recruited from. Now, you take my State of Florida, for instance; there were no advertisements placed in the newspapers there, asking for help for this Government work. But the New York and Philadelphia newspapers carried great, big advertisements, calling for labor.

Well, the place to get American labor is not in the big cities; labor of the class that I have in mind should not be obtained from there. There is an immense amount of skilled, loyal labor that can be recruited in this country by going out where the real Americans live and not in the slums of the big cities. It is a tremendous mistake to go to the slums of the big cities for the labor of this country, for that destroys the morale and the skill of the real, genuine, patriotic American labor. By going out among the States you could recruit a tremendous amount of the finest kind of labor.

The CHAIRMAN. What is the situation with regard to the class of abor at Hog Island now?

Mr. ALLYN. The situation is very much improved. I am glad to ay, and I hope that the improvement will continue. And, from the tandpoint of American labor, I hope that some recognition can be given: I think it is going to be necessary to continue to encourage ighly intelligent labor. You see, we are not a Nation of shipbuilders; soon we will be confronted with the problem of training Americans to build ships: the Americans will really be the safest kind of labor to have on them. I am thinking of bringing up my boy and putting him in a training school at 16 years old to learn that work, and thousands of other Americans will do the same thing, and then we will soon have a great army of real American shipbuilders.

But they have got to be trained: and to do this something must be done to develop the patriotism of the country, to encourage labor into that industry from the right American source.

I am therefore convinced that somehow the National Government ought to identify the men engaged in this national service, after a certain amount of service, in whatever way the details of the plan may be arranged. I understand that that was done in the case of workers on the Panama Canal. We notice that soldiers have a service medal after serving a certain length of time. Perhaps there may be a little uniform designed, so that if a man was a laborer in the shipyards he would be entitled to common courtesy, and so that he would be differentiated from another man who was not working for his country. There is something in the heart of every living man, so that he will do something for his country that he would not do for anything else in the world. And that is the greatest problem that America has to-day, as to its laboring men—the men who will give up the avocations, however pleasant they may be, in order to engage in any form of toil for the Government—if they can be identified with a patriotic duty in connection with that work; and that, to my mind, is the ideal assistance that the American Government wants at he present time.

Senator VARDAMAN. Your idea, then, for solving this labor problem is to treat the American laborer as a patriotic citizen and not s a subject?

Mr. ALLYN. That is exactly it.

Senator VARDAMAN (continuing). To let him understand that this his country and his fight?

Mr. ALLYN. Exactly.

Senator VARDAMAN. And that it is his duty to perform his task, whether it be in the trenches, in the camp, in the field, or in the hops?

Mr. ALLYN. Yes, sir.

Senator VARDAMAN. To let him feel that it is his affair, and then ou think he will take a personal interest in this war?

Mr. ALLYN. Yes, sir.

Senator VARDAMAN. Well, I agree with you about that.

Mr. ALLYN. Oh, you are correct there; but the point I am trying o bring out is that I think he will want his grandchildren to be able o prove that he did perform that patriotic duty. Suppose his grandhild wants to belong, for instance, to the "Patriotic Daughters of

America"? She would have nothing to show his service. And the social distinction is one of the few things that we try to buy for our dear ones, and the neighbors of this man's daughter or granddaughter will say to her, "My grandfather was a soldier of the Great War what did your grandfather do?" And the descendant of this shi yard worker would say, "He was a laboring man," but she will ha no records of any kind to show that he was laboring for his count So I believe that there should be some way evolved by which cert forms of labor can be connected directly with Government servi that is, connected directly with war work, and that that should recognized in some official way.

That, in itself, would be a protection for labor; it would di entiate that kind of a man from the pure money seeker. That v have a tendency to avoid strikes. A man would be asham strike, without consulting his Government, if he was tagged patriot and recognized as such when working in the shipyard.

Senator VARDAMAN. Well, do you think that a man with th spirit of patriotism in his heart cares anything about those frills of that kind?

Mr. ALLYN. No; personally he does not care about them.

Senator VARDAMAN. Every man who is serving his counti patriot, whether he be on a farm, or in the shops, or in st wherever he is doing his duty as a citizen. He is entitled to from his fellow men the respect that that sort of work a position carries with it.

Mr. ALLYN. Senator, if he is on his own farm, he is at ho therefore he is treated with respect; it is his farm, and he is to all the credit that is coming to him. But suppose he gives farm, and is called away to some other duty, which is less a where he has to perform an extra hazardous duty; he has his family and his home and his friends. Of course, I am presenting the thought that any man needs a special reco that way to distinguish him from his fellows, except that it is for instance, in this case that they are not loyal. And I a in my work there, the same color as 25,000 other workme percentage of whom I believe to be disloyal. And, throug vestigation here, the reputation of those men has been l stroyed, because it is claimed that a great many of them a on the job. And I would like, in some way or another, fo workmen to be differentiated from that class of workmen, them discredited. That is just as important, I think, to t as that we should be credited. And a farmer, of cou different status altogether—I think you mentioned the fa.

Senator JONES. Referring back to the time when that cl which you have described was there in large numbers, d of any destruction of property or apparent attempts to in or retard the work?

Mr. ALLYN. No; there were no serious attempts at de property. You understand that this development there, recently, was not in such a state that it would pay anyo to destroy it; there were the preliminary buildings, of the ways, in the middle of the winter, and the pile driv expensive part of the work, are not anything that could

yed; so that successful attempts at destruction probably could carried out until the work was nearer completion.

ıtor JONES. Were any of the tools or machinery tampered

ALLYN. A tremendous amount of robberies, as I understand, lace; petty robberies, you know. And many of our laboring ost their lives, and others were permanently injured by thugs urderers—not on the island itself, but after they were paid off ere trying to get back to the city; that was largely due to the nditions as to transportation. The death rate there, I believe, igh that the number of dead and wounded in that enterprise ; the past few months has been greater than would be for a r number of men on the actual battle front.

ıtor JONES. Has there been much loss of life or injury in the tself in the yard?

ALLYN. Yes, sir; a tremendous amount. This pile driving is the most dangerous occupations in the world; and naturally orkmen on that work had to be recruited from men who had en a great deal on that kind of a job. And very many pile s were crowded in together rushing the work; and then they orking part of the time at night, where artificial light had to be which gives a different reflection from the light in the daytime; that kind of work they go by signals; and just the waving and may mean the loss of a man's life. What is known as the key," who is up at the top of this high derrick reaches out for pe to pull the pile in so that the hammer may come down; he is out there a man may lower his hand for the hammer to lown, and then some man's head gets in there and he does not what happens; he has simply forgotten, that is all. There have tremendous number of accidents of that kind, as there were to be under the circumstances. There have been more than I ver known. Of course, I have never been at a place where as so much work going on; but I know that those pile drivers used an enormous number of accidents. And the sickness has en very great, principally on account of the cold weather: ally everybody had tonsillitis; and there was developed what lled the "Hog Island cough," which became very prevalent. of those people had to be treated in the hospital; it was a ardship. No amount of money could pay those workmen for hey had to go through with. They would not have considered oposition at all from the standpoint of a private contractor. y considered the necessities of the case.

CHAIRMAN. Was very much time lost on account of the bad r?

ALLYN. Yes, sir; a great deal. When that very cold weather n, it slowed up everything, of necessity.

tor JONES. What proportion of the labor there now would nsider good, average American labor?

ALLYN. I would consider that a very high proportion of it . In the last 30 days—I am just estimating the new labor en coming in. When the class of labor that I have been ng of had been weeded out, it made a labor much more

desirable there, and there has been an improvement in the organization generally.

Senator VARDAMAN. Who weeded that labor out?

Mr. ALLYN. I can not tell you; it was done before Admiral Bowles came on; that is a sure thing.

Senator VARDAMAN. You seem to be particularly displeased with the Jewish labor there. Do you find that the Jew, as a race, is less efficient or less loyal than any other class of people?

Mr. ALLYN. The American Jew, I find, is loyal.

Senator VARDAMAN. Is it not a fact that the Jew as a race is about the most law-abiding, law-respecting, or quite as much so as any other man of the white race?

Mr. ALLYN. Yes. The rabbit is a very much more peaceful animal than a lion, but I would like the lion myself.

Senator VARDAMAN. I understand; that is true.

Mr. ALLYN. But they are peaceful in that pacific way that means nothing.

Senator VARDAMAN. You do not care so much for a belligerent if he is working?

Mr. ALLYN. I care for a belligerent——

Senator VARDAMAN (interposing). I know that in the war between the States that the Jew was a loyal soldier, he was an efficient soldier, and he was a faithful citizen on both sides, and I know as citizens of my State, taking the Jews as a class, none are quite so obedient and law-abiding. It is the rarest thing that you find them violating the law. If you have there inefficient men, green men, men who are disloyal, they ought to be kicked out. But I think it is hardly fair to make the fight against the Jew as a race.

Mr. ALLYN. I said the Russian Jew, of course.

The CHAIRMAN. I understood Mr. Allyn's reference to be to the "foreigners" whom he designated as Jews.

Mr. ALLYN. Yes, sir; those speaking the German language, that is what I meant. I imagine that German is not exactly a highly dignified language to be used on the job at the present time, and I have in mind those men coming from that section of the country originally.

Senator VARDAMAN. I do not think a man who is disloyal to this Government ought to be employed, whether he speaks German, English, Scandinavian, French, or what not. The language does not make the man, but if the man is not right and what he ought to be he is not fit for that or any other service in this country.

Mr. ALLYN. It is natural to presume the people of those nations of our allies, for instance, the Italians, of whom there are a great many employed there, and they are very efficient, very eager workers; they are as anxious to help in this war as Americans are. It is very evident in their demeanor, and their efficiency generally. We have great respect for them, no matter whether they are the commonest kind of laborers or not.

Senator VARDAMAN. So far as that is concerned, you know the labor that a man performs has nothing whatever to do with the respect with which he should be held by every other man.

Mr. ALLYN. That is right.

Senator VARDAMAN. "The rank is but the guinea's stamp: the man is the gold for all that." And I do not think that that ought to cut

ny figure. I think some of the most perfect gentlemen I have ever nown were accustomed to pulling the bell-cord over the gay and estive mule, or wielding the hammer, or pushing the saw—if he is ight in heart and mind he is entitled to all the love and respect that ny man is, regardless of his vocation.

The CHAIRMAN. Well, with regard to this kind of testimony that ou speak of, have you in mind as applicable to workmen in the shipards of the country now any specific recommendation to make?

Mr. ALLYN. Yes, sir. I was anticipating that question. I would uggest that in each shipyard a laboring man's newspaper be pubished similar to the camp paper in each of the cantonments, which as proven of great service; that, if it would not be unreasonable, o have a building erected somewhere, when the plant is large enough nd would warrant it, where laboring men might congregate and ect for the purposes of their general welfare. Of course, the Y. M. . A. is now doing a wonderful and excellent work in that respect, ut I mean as assembly hall of some kind where any little matters ight be adjusted, or where the representatives of the Government anyone else could meet the laboring men on any occasion on their wn ground—some provision or recognition of them as an actual rce—for the purpose of unifying and coordinating labor.

The CHAIRMAN. Is this paper, the Hog Island News, circulating t there?

Mr. ALLYN. That is circulating out there, and you will notice it is very admirable little paper. I have read it very carefully, and the st issue illustrates very well what I had in mind. You will notice refers there to the employees having a dance, a social affair, for stance, and those employees turned out to be the clerks of the stitution in Camden and Philadelphia and elsewhere. There is ews of what is going on at headquarters or in a general way. here is no specific news of the actual work going on in the plant r the people who are doing it; there is no recognition of the men ho really do the work. In other words, it is printed evidently by omebody in the office, and as far as it goes it is admirable, but it oes not at all have any relation to the men inside, and it is very ndifferently circulated. I gave an armful of them myself to emloyees who were very glad to get them and read them; but there is othing of the actual work, you will notice, except in very general erms.

The CHAIRMAN. Do you think this publication does any good, as t is?

Mr. ALLYN. Every publication is of service. I think that it does ot cover the field. I do not see very much in it with reference to he investigations, and I did not see anything as to whether it either efends or takes any stand in the matter whatever. It has a small mount of news, but it is very general. I think that it would be fine thing if it proceeded along the lines of the great work done r the New York Life Insurance Co. by George W. Perkins when created an agency's rivalry among their own agents, by a publicaon which he produced in tremendous numbers. I remember that, cause I worked for the New York Life at one time. If there was a wspaper that circulated among the men sufficiently that would call tention to the advancement each week that one section made as com-

pared with the others, which had a little idea of encouraging the work by mentioning those individuals who were actually on the job, it would have a great tendency to inspire pride among the employees in their work, and they would have something to talk about instead of the graft that is going on. I think it is a very bad thing when workingmen are led to believe that their superiors are dishonest; and personally I do not believe that there is nearly so much dishonesty in the world as is ordinarily claimed.

The CHAIRMAN. So far as you see now, the work is going on in fairly good shape, and there is practically no great amount of waste, duplicating of pay, or pay when there is no work done, and that sort of thing—loss of time, etc.?

Mr. ALLYN. Just now things are admirable. Of course, the transportation problem will have to be solved before any great expansion takes place. We are not doing the amount of work we should, but for the number of people employed the work is going ahead very fine. Of course, we should increase the number of people there.

The CHAIRMAN. Do very many of them live on the grounds?

Mr. ALLYN. As many as can find accommodations. The lack of material, I suppose, has had a good deal to do with slowing up the work, where they have been preparing barracks and things like that, and the more important buildings are being pressed. I regard the work being accomplished as phenominal; I regard it as really wonderful. I may not be an expert, but when I read in the newspapers about the impressions of people that there has been nothing done, I want to say that there has been a tremendous amount of actual work done. When you consider the meager efforts of your own hands, and how little the efforts of a few is, you must have some idea what a monumental idea it is, especially during this terrible winter.

The CHAIRMAN. If there are no further questions, Mr. Allyn, you may be excused. We are very much obliged to you for your statement.

STATEMENT OF MR. ALBERT FREEDMAN, 703 BRISTOL STREET, PHILADELPHIA, PA.

The CHAIRMAN. Where do you reside, Mr. Freedman?

Mr. FREEDMAN. In Philadelphia.

The CHAIRMAN. What is your age?

Mr. FREEDMAN. Twenty-seven.

The CHAIRMAN. What is your occupation?

Mr. FREEDMAN. At the present, salesman. I was at Hog Island up until last Wednesday.

The CHAIRMAN. What were you doing at Hog Island?

Mr. FREEDMAN. I was in the stores department—in the requisition department, which is a subdepartment of the stores department.

The CHAIRMAN. And who were your superiors in that department?

Mr. FREEDMAN. I can give you my immediate superiors.

The CHAIRMAN. Yes.

Mr. FREEDMAN. You want his name?

The CHAIRMAN. Yes.

Mr. FREEDMAN. Mr. Focht was the head of the subdepartment I was in.

The CHAIRMAN. He was the head of your department?

Mr. FREEDMAN. Of the department I was in, a part of the stores epartment. The stores department has various departments in it.

The CHAIRMAN. You wrote, Mr. Freedman, to the committee that ou had some information that would be of interest to them?

Mr. FREEDMAN. Yes, sir.

The CHAIRMAN. I do not know whether any member of the committee has talked with you or not. I have not done so, and I do not now what information you referred to, and I would just ask you to o on and state it in your own way.

Senator VARDAMAN. Mr. Chairman, will you let me make a suggeson? This record is becoming voluminous. It is being filled up with great deal of irrelevant and impertinent and unnecessary material. would suggest that you confer with Mr. Freedman and other witesses that may come here and find out if the statements that they ant to make are really of benefit in making this investigation, and ive that expense of printing these things. I submit to the committee at it would be prudent to do that.

The CHAIRMAN. The Chair does not like to take that responsibility.

Senator VARDAMAN. I, as a member of this committee, should be ery glad to impose that responsibility upon the chairman.

Senator CALDER. I would suggest that we delegate Mr. Vardaman, ho is an eminent lawyer and one of the best cross-examiners on the ommittee, to attend to that.

The CHAIRMAN. I think we can finish with Mr. Freedman in a few inutes.

Mr. FREEDMAN. I will be very brief.

Senator VARDAMAN. Go ahead. I would like it understood that it not with reference to this witness that I make that suggestion, but ith reference to witnesses generally, that they communicate with the hairman before they come here.

The CHAIRMAN. I will be very glad to consider your suggestion, enator, in that regard. There have been instances where it was perctly clear that the information would not add anything to what we ive had.

Senator VARDAMAN. Of course, we want all the facts that we can t throwing light on the transactions, and I would not discourage ybody who has a pertinent, important fact in giving it to the comittee.

Mr. FREEDMAN. Senator, I wrote a letter to the committee, and [illegible] Senator Johnson, that I had some information. Senator Johnson plied to it, asking me what it was, and I gave him some details at it was; and on the strength of that reply I [illegible] I am here. Senator Johnson has given you [illegible] I have something to I you.

Senator JOHNSON. I [illegible] letter I [illegible] I member receiving a letter from you [illegible] I responded saying if u knew anything I would be very glad to have you give it.

Mr. FREEDMAN. I [illegible] letter, ich consisted of four pages.

Senator JOHNSON. At any rate, if you know anything we would be ry glad to have you state it.

Mr. FREEDMAN. I will be as brief as possible. I prepared on the train a few facts and I will just read them to you.

Senator NELSON. Before you proceed, what has been your function there?

Mr. FREEDMAN. My function there was filing requisitions. A requisition is an authority to order goods; and I filed those requisitions.

Senator NELSON. What pay were you getting?

Mr. FREEDMAN. $23.50 weekly.

Senator NELSON. What were you engaged in before you were employed there?

Mr. FREEDMAN. I was a clerk some time before that. But immediately before that I was in the insurance business for 18 months.

Senator NELSON. For 18 months you were in the insurance business, and when you come to Hog Island was made requisition clerk?

Mr. FREEDMAN. Yes, sir.

Senator NELSON. Who employed you?

Mr. FREEDMAN. The head of the subdepartment.

Senator NELSON. That is all. Go ahead.

The CHAIRMAN. Have you lived all your life in Philadelphia?

Mr. FREEDMAN. No, sir.

The CHAIRMAN. Where were you born?

Mr. FREEDMAN. In London, England.

The CHAIRMAN. How long have you lived in Philadelphia?

Mr. FREEDMAN. About two years.

Senator NELSON. Are you a citizen of the United States?

Mr. FREEDMAN. My second papers are pending.

Senator NELSON. You have not got them yet?

Mr. FREEDMAN. No; they are pending. I have applied for them.

Senator VARDAMAN. What do you say your wages were?

Mr. FREEDMAN. $23.50 weekly. In my reply to Senator Johnson I stated about the mismanagement in the stores department; also about mishandling of material. In making those statements they were prompted mainly by a man who is an authority on that subject, and who agreed to come with me, but he backed out and decided not to come, because he was afraid. And gentlemen, I could give you names of others who could give you valuable information.

Senator NELSON. What was his name?

Mr. FREEDMAN. Holbrook.

Senator NELSON. What business is he in?

Mr. FREEDMAN. At the present time he is unemployed.

Senator NELSON. Was he discharged?

Mr. FREEDMAN. Yes, sir; he was discharged.

Senator NELSON. And you were discharged?

Mr. FREEDMAN. I was discharged; yes, sir.

Senator NELSON. And you never thought of giving the information until you were discharged?

Mr. FREEDMAN. I did think of giving the information before I was discharged.

Senator NELSON. Go ahead.

Mr. FREEDMAN. Gentlemen, the Senator has made the suggestion that I have had no experience before coming here, and also that I am here for personal motives. You will see, when I make a brief statement, that that is not correct at all.

Senator NELSON. Never mind the reason; tell us what you know.

Mr. FREEDMAN. Well, I will tell you what I know. This man having backed out, removes about nine-tenths of the information I could give you, because I am not experienced, but I can give you the little I know, according to my own observation.

Gentlemen, this is the letter I wrote to Senator Johnson:

Your inquiry of 11th, replying to my note of 10th, received.

You realize I can not give you full details in a letter. I will touch on a few points here which, I assure you, can be proven.

My information concerns the general stores departments at Hog Island, where I am employed.

These departments are exceedingly important, being responsible for the receipt and distribution of thousands of dollars' worth of material (tools, equipment, and supplies, etc.).

Admitting that railroad congestion existed, weather was unfavorable, labor trouble existed, transportation difficulties existed, will prove beyond doubt that these things afforded shelter for excuses, and were continually abused to cover mismanagement.

Senator NELSON. That is only argument. Now, the facts?

Mr. FREEDMAN. I am giving you the letter, and then I will take up later, so far as I can, the facts. You can question me on the letter. I only want to show you the statements I made. The Senator told you he never received that letter.

Senator JOHNSON. No; I did not state that. I stated that it was because my office has been neglected.

Senator VARDAMAN. Go ahead and read it.

Mr. FREEDMAN (reading):

Proper facilities for receiving the material were not prepared. I will show who was responsible and also that these responsible heads did not seek competent people to correct many leakages (which I can give in detail). Also that when competent assistance was offered to remedy lack of foresight and inefficiency, these responsible heads refused to permit any assistance, even though unselfishly and patriotically offered, and would not even investigate the value of these offers. Why? I can show why.

I can prove many matters that appear small, but which will emphasize the poor system prevailing.

For example, proper records of receipts of all materials and close accounting of all distribution were not kept. The result was, and apparently is, that material was lost or was not to be found.

Also contractors' material men--

They are the men employed by contractors to look up material, to order material—

were continually complaining that material ordered by them for certain jobs were used by others and so delayed many important jobs.

Proper management would have distributed the material carefully and correctly, but the original system was wrong, yet is still in vogue but for a few slight improvements.

Thousands of dollars of material is wasted through improper handling.

I have induced a man who has had opportunity to study these conditions to agree to accompany me to Washington.

He is not here, and other men could give you information, but they are afraid, and there is good reason for them being afraid. The penalty for coming here is dismissal. I was dismissed when it was known I was to come here. I am not here because I was dismissed. When it was known I was to come here I was called in and asked, "Do you expect to testify in Washington?" I replied, "Yes; I expect to do so." And then I was told, "Well, here is time to prepare your testimony you can give."

Senator VARDAMAN. Who said that to you?

Mr. FREEDMAN. Who said that to me? The superintendent of stores.

Senator VARDAMAN. What is his name?

Mr. FREEDMAN. Lynch.

Senator VARDAMAN. That is all right; we want the names.

Senator JONES. How did you come to tell them you were coming here to testify?

Mr. FREEDMAN. I went to the head and told them I expected to testify. I told them the conditions which I saw were wrong.

Senator VARDAMAN. To whom did you tell that?

Mr. FREEDMAN. I went to the works manager: the man in charge of the whole transaction on the island.

Senator JONES. Who was that?

Mr. FREEDMAN. T. A. Carr.

Senator JONES. What did you tell him?

Mr. FREEDMAN. I said, "Mr. Carr, there is a man here, an experienced man here"—not me—"who wants an opportunity to show you the weaknesses in this department;" and Mr. Carr has considered what I said. I said, "Now, Mr. Carr, Washington will know about these weaknesses, because I feel it is my duty, and the man who wants this opportunity feels it is his duty, to tell them. But I am telling you in advance." I wanted it to be above board and to tell him. Then he investigated immediately; that is, 15 minutes after that he sent for this man I have reference to.

The CHAIRMAN. Mr. Holbrook?

Mr. FREEDMAN. Yes. But he referred this man to the superintendent that had discharged him and did not see the man himself, and let the investigation peter out.

Senator JONES. Did Mr. Carr warn you against coming here or tell you you would be dismissed?

Mr. FREEDMAN. No; he did not warn me. Mr. Carr referred the note that I sent him to the immediate head of my department.

Senator JOHNSON. Let me get this chronologically correct, if you please.

Mr. FREEDMAN. Yes, sir.

Senator JOHNSON. You wrote me a note somewhat similar to the note that the chairman of the committee has spoken about, that you had valuable information? And that you were ready to impart it. At that time you were working at Hog Island, were you not?

Mr. FREEDMAN. I was working at that time at Hog Island, and everything was O. K.

Senator JOHNSON. You received, in response, a brief communication from me asking you to detail it to me.

Mr. FREEDMAN. Yes, sir; I have it with me.

Senator JOHNSON. And then you wrote me this letter that you were just reading?

Mr. FREEDMAN. Yes, sir.

Senator JOHNSON. That was our complete correspondence?

Mr. FREEDMAN. Yes, sir.

Senator JOHNSON. Now, at what point of time was it that you went to any of your superiors and stated that you were going to testify—after the letter was written to me?

Mr. FREEDMAN (after a pause). I am not trying to invent anything; I am thinking of the date.

Senator JOHNSON. That is all right; take your time.

Mr. FREEDMAN. Yes, sir; after the first letter I wrote you.

Senator JOHNSON. And you were then still working?

Mr. FREEDMAN. I was then still working for them.

Senator JOHNSON. What was the reason that you wrote to the committee, or what was the reason that you wrote to me, and what was e reason that you went to your superiors to tell them you were ing to testify or that you would make your disclosures?

Mr. FREEDMAN. Why, to be candid with you, it appeared to me nce that I was very foolish to have gone to him, very foolish to ive done so. I wanted to be square; I wanted him to know what was going to say, because I knew it was the truth, and I wanted give him an opportunity to remedy those conditions for their vn sake.

Senator JOHNSON. Was there any other reason that actuated you, cept that?

Mr. FREEDMAN. Yes; there was another reason.

Senator JOHNSON. What other reason?

Mr. FREEDMAN. I felt like Mr. Holbrook was misunderstood—this in who was discharged.

Senator JOHNSON. Well, but he was discharged after you had gone your superior.

Mr. FREEDMAN. Yes, sir.

Senator JOHNSON. All right. Now, was there any other reason it actuated you in going first to your superior?

Mr. FREEDMAN. When I went to my superior I told him that I exted to testify in Washington; I had sent a note to that effect. en he interviewed me immediately.

Senator JOHNSON. Well, your idea in going to him and your idea expecting to testify is what? What was the idea in your mind?

Mr. FREEDMAN. My original idea in going to him—I went to him ice—my original idea in going to him was to put before him the ct that here was a man who could give him some valuable assistce, and I wanted to bring it to his attention; that was my original ea. Now, that man showed me certain weaknesses on the island—at is, Mr. Holbrook—and I told Mr. Carr that this was the man io could remedy those weaknesses. I was prompted by the best intentions for Mr. Carr, and for the man, and for everybody ncerned. This man did not receive recognition. In the second te I wrote to him I stated I expected to testify at Washington. other words, I felt in my own mind that I would have to bring Washington the conditions.

Senator JOHNSON. And for what particular reason did you think it?

Mr. FREEDMAN. Because I felt that since I wrote that—remember u have got a whole lot of information; two weeks ago I was dy to give you information that you have since received from . Towle, the Government engineer—a whole lot from him and m others. But I just wanted to support his information in my n little way, so far as it concerns my own department. I can t give you information regarding the island generally. My idea

in coming here is to give you in my own little way the support of testimony of inefficiency. There is much good about the island; you have heard that. I know much good about the island, but you want to know where the weaknesses lie, and I come here to try to show you where it lies, in my own little department, and want to show you the system that is wrong. Possibly what occurred in my department existed in other departments, but that I can not say.

Senator JOHNSON. Go ahead, if you please.

Mr. FREEDMAN. Now, my remarks, gentlemen, will jump from one thing to another, because I prepared this on the train.

More than double the office help were working when I came there than were working when I left. In other words, for example, there were 40 ledger clerks employed, and after it was found 35 of them were unnecessary——

Senator NELSON. How many?

Mr. FREEDMAN. Forty ledger clerks in the one stores department, and afterwards it was found that 35 of them were not necessary.

Senator VARDAMAN. Just in that connection, do you know where those clerks came from?

Mr. FREEDMAN. Yes, sir.

Senator VARDAMAN. And at whose instance they were employed?

Mr. FREEDMAN. No; not directly. But I can give you my opinion.

Senator VARDAMAN. All right, what is it?

Mr. FREEDMAN. My impression——

Senator VARDAMAN. All right; let it come.

Mr. FREEDMAN. Those men came there apparently because they had the impression that there is a gold mine down at Hog Island, good jobs to be had, plenty of money, big salaries—they had that impression. Certainly they applied in the usual way through application and were employed, just the same as you employ a man. They were considered necessary down there, and they were employed in the usual way, and they were discharged at a moment's notice.

The CHAIRMAN. How long were they employed all along unnecessarily?

Mr. FREEDMAN. They were employed—I was two months, and they were there when I came, and it was about a week before I left there that they were discharged. So, we will assume they were employed there from two to three months.

Senator NELSON. What were they doing, Mr. Freedman? I did not understand that.

Mr. FREEDMAN. They were doing very little, but they were supposed to be doing——

Senator NELSON (interposing). What was the class of work they were doing?

Mr. FREEDMAN. They were supposed to be doing—each clerk had a ledger referring to different tools—one was concerned with bolts; another man was concerned with steel; another man was concerned with lumber. What the man did was to enter into this ledger what was received. This ledger was always two or three weeks behind, because I had occasion to refer to it in my own work many times, and so it was to no particular purpose. You will readily see that the original system of employing those men must have been wrong.

Senator NELSON. What were they paid, do you know?

:r. FREEDMAN. I noticed there were young boys of 18, 20, and
e a little older—some 25.
he CHAIRMAN. You have not said what they were paid.
:r. FREEDMAN. Pardon me. I was answering another question. I
answer that.
he CHAIRMAN. All right.
:r. FREEDMAN. They were paid from $20 to $25 weekly, and that
not depend upon ability. It depended just upon the peculiar
lition under which they were employed.
enator VARDAMAN. Where did those young men come from?
:r. FREEDMAN. Naturally they were residents of Philadelphia.
enator VARDAMAN. Of Philadelphia?
:r. FREEDMAN. They would not come from outside of the city for
sition of that kind.
enator VARDAMAN. Do you know that of your own knowledge?
:r. FREEDMAN. I am pretty sure of that. I could bet 90 per cent
from Philadelphia; they naturally would be.
he CHAIRMAN. Go ahead. That is one item, ledger clerks.
[r. FREEDMAN. A department head was employed just merely on
ntroduction. In other words, gentlemen, a certain department
l was inefficient and resigned, and he introduced his own suc-
or, who happened to be a friend of his, and this successor had no
erience at all in the kind of work, because I witnessed the intro-
:ion. I will make myself more explicit: If you, Senator Johnson,
employing a stenographer who was inefficient and resigned, and
ntroduced you to his own successor, would you employ that man
out investigating? No. I witnessed that introduction, and the
was employed, simply because he was a school friend, at an
avagant salary.
enator NELSON. Who was that other man? Was he as good as
man who resigned?
r. FREEDMAN. Why, it is hard to say. Somebody had to take that
's place; I do not know whether he was as good or not.
he CHAIRMAN. What were his duties as department head?
r. FREEDMAN. His duties as head of the requisition department
to order material; in other words, if a contractor wanted ma-
l he would come to the requisition department—he would first
o the stores department; the stores department would say, "I
not got it"; then he would go to the requisition department and
"I want so many, or so much goods for building this, that, or for
purpose," and the requisition department would order it. The
in charge at the present time and the man whom I say was in-
uced did not know the difference between two tools, and I will
ain why that is later. He had to ask his assistant, "what is a
plate, what is a bolt, what is this?" He was an insurance sales-
. And, gentlemen, there are many salesmen employed who have
themselves positions, who have no knowledge, no experience in
truction and hardware at all, because they are probably friends
tone & Webster, men who are there. I say probably—I say they
I will not use the word "probably," gentlemen.
enator CALDER. What experience had you had in this line of work
re you went in there?
r. FREEDMAN. None at all; not a bit.

Senator CALDER. How did you obtain your position?

Mr. FREEDMAN. I quit my job to get into the shipbuilding business. I quit a $26 a week job, and I went down to Cramp's first, and they would not employ me because I had had no experience.

Senator CALDER. What was your experience?

Mr. FREEDMAN. In what?

Senator CALDER. Previous to your being employed at Hog Island

Mr. FREEDMAN. I had clerical experience; I had also selling experience.

Senator CALDER. You said you had been in the insurance business 18 months.

Mr. FREEDMAN. The last job I had was the insurance business.

Senator CALDER. And before that?

Mr. FREEDMAN. And before that I sold books—I was in business for myself.

Senator CALDER. Always in Philadelphia?

Mr. FREEDMAN. No; before that I was in Brooklyn, and before that in England.

Senator CALDER. When did you come to Brooklyn?

Mr. FREEDMAN. Six and one-half years ago, from England.

Senator CALDER. Whereabouts in Brooklyn did you live?

Mr. FREEDMAN. I lived on Forty-first Street, Brooklyn. Is that Senator Calder? [Laughter.] Let me explain, gentlemen, that salesmen were employed there, because they had the ability to sell themselves good jobs. That is the only reason they were employed there, not because they had experience. You might say to me——

The CHAIRMAN. You had not finished the other statement. You went to Cramp's and they did not employ you because you had no experience.

Mr. FREEDMAN. Pardon me. From there I went to Hog Island. I heard about it, and I went there, and the only job I was fit for—I was not going to falsify myself—was a clerical position, in a minor capacity. As long as I was in the shipyards at $20 a week it was satisfactory to me. I thought later on, if I proved my ability, I would get more, and I did not know anybody there when I came, but after I got there I met people I had known before.

The CHAIRMAN. Who did you apply to?

Mr. FREEDMAN. I filled out an application in the usual way at the employment office, and after waiting half a day a boy led me around with the other men to the different places where they had to go. In other words, 10 men were employed in different occupations at the employment office, and a boy guided these 10 men to the different positions that they had to occupy.

Senator VARDAMAN. Was any investigation, Mr. Freedman, made of your qualifications and where you had been before or whether you were honest?

The CHAIRMAN. He is trying to tell that.

Senator VARDAMAN. Or whether you were capable, or anything about it?

Mr. FREEDMAN. Judging by some of the men down there, including myself, I would say there was no investigation.

Senator VARDAMAN. Did they ask you or require you to give any references or ask you what you had been doing and your profession or vocation, or anything like that?

Mr. FREEDMAN. Senator, in the original applications those questions are stated, but many men were employed without filling out applications at all. In fact, the majority of men in the clerical department were employed merely on introductions or merely on recommendations. Every man had a feeling there that he could get a friend a good job.

Senator VARDAMAN. Do you know anything with respect to whether anything was paid to anybody to get them a job?

Mr. FREEDMAN. No; I do not know that. Such a thing is very possible there—very probable.

Senator VARDAMAN. Have you seen anything of that kind?

Mr. FREEDMAN. No; I have not.

Senator VARDAMAN. Have you heard anything of that kind?

Mr. FREEDMAN. No; I have not heard of anything of that kind.

Senator CALDER. Mr. Freedman, did you hear of anybody drawing double pay or of anybody being on the pay roll who did not work?

Mr. FREEDMAN. Yes; I heard about that.

Senator CALDER. Do you know that?

Mr. FREEDMAN. It is not right to say to you that I do know simply because I heard somebody say so: for instance, when I visited friends I heard it said, "Oh, I know a fellow that drew three pays: I knew a fellow that went in there in the morning and dropped his brass check and went home again and went back in the evening."

Senator VARDAMAN. Do you know anything of that kind of your own knowledge?

Mr. FREEDMAN. No; I do not.

Senator RANSDELL. Can you give us the names and dates and circumstances, so that we can trace it down? That is a very grave crime.

Mr. FREEDMAN. I am only answering questions now.

Senator RANSDELL. I am asking you a question. That is a very grave crime if it has been done.

Mr. FREEDMAN. No, sir.

Senator RANSDELL. You can not tell any case of that kind?

Mr. FREEDMAN. No, sir. There are many men who could, if they were not afraid of losing their jobs.

Senator RANSDELL. Now, tell us two names of persons that can tell about it. I want to know the names and addresses of two men who can tell us those things.

Senator VARDAMAN. Just let him tell one. We will take that one.

Senator RANSDELL. We will take one if he has not two.

Mr. FREEDMAN. Gentlemen, I have made a note of that and will give it later, because I do not want to waste time thinking about it now.

There is a general appearance of idleness prevailing there.

The CHAIRMAN. I would like for you to finish up about what experience you have had and the experience of others first. I know Senators keep interrupting you with questions.

Mr. FREEDMAN. Do you want me to refuse to answer questions?

The CHAIRMAN. No; certainly not. I am saying you are not to blame.

Mr. FREEDMAN. Yes, sir.

The CHAIRMAN. You started there with the filing of your application, and you said you were conducted by a boy somewhere. What then happened?

Mr. FREEDMAN. As soon as I got there, the first person I saw was a man who worked with me in the insurance business, and he got a nice little job at $30 a week, which was almost double what he got before. He said, "Hello, what are you doing down here?" I said, "Looking for a job." He said, "I will give you a note to my brother." So he gave me a note to his brother—I will give you names if you want them, but I do not want to reflect upon any of those gentlemen there—well, his brother was glad to meet me, and there was the head of the requisition department there at the time. So the brother said, "Do you want an expert accountant?" He said, "Would it be doing you a favor if I employ this man?" "Why, yes." "Well, I can give him a job then." So I was employed.

The CHAIRMAN. As an expert accountant?

Mr. FREEDMAN. No; I was not employed as an accountant, but that is the expression he used. I was not employed as an accountant.

The CHAIRMAN. You were employed as a clerk?

Mr. FREEDMAN. As a clerk.

The CHAIRMAN. Were you employed right there?

Mr. FREEDMAN. Yes, sir.

Senator NELSON. What other development took place? Go on. [Laughter.]

Mr. FREEDMAN. All right. Gentlemen, I did not go around looking for faults, because faults are easy to find, and I am not here to knock or say bad things.

Senator NELSON. Oh, no. Tell us what you saw and what you know.

Mr. FREEDMAN. Yes, sir; as long as you do not think I am here for personal motives, I want to tell you.

Senator NELSON. Oh, no; never mind that. Do not indulge in any preaching. Tell us what you know.

Mr. FREEDMAN. All right, sir. A gentleman next to me, a boy of 20, received $29 a week for doing the same work. I just want to show you the difference in pay, for no apparent reason at all.

Senator NELSON. For the same work you were doing?

Mr. FREEDMAN. Exactly the same work.

Senator NELSON. And you were getting $23?

Mr. FREEDMAN. $23.50, and he got $29, which was almost double what he got before. I will tell you why he got it.

Senator NELSON. Was he doing the same work you were?

Mr. FREEDMAN. Doing the same work; yes, sir.

Senator NELSON. That was just one man?

Mr. FREEDMAN. Yes, sir. There are other cases in every department. I will tell you why he got more than I if you want to know. He lived on the same street as the department head.

Senator NELSON. That is something; that is a point in his favor.

Mr. FREEDMAN. I beg your pardon.

Senator NELSON. That is a point in his favor.

Mr. FREEDMAN. Sure it is; yes sir. [Laughter.] In his financial favor; yes.

Senator NELSON. Go ahead. [Laughter.]

Mr. FREEDMAN. The stores department that I had connection with has numerous heads. It has about a half dozen superintendents. *This is not an exaggeration; I would not make a statement here that I would not repeat a thousand times.*

enator NELSON. How many clerks did they have?
r. FREEDMAN. How many clerks?
enator NELSON. Yes. You say they had many superintendents. many clerks? Did they have a superintendent for each clerk?
r. FREEDMAN. Well, no, not exactly.
enator NELSON. How many clerks and how many superintendents there in your department?
r. FREEDMAN. How many superintendents?
enator NELSON. Yes; and how many clerks?
r. FREEDMAN. I can tell you how many there were when I left, hly.
enator NELSON. I do not mean that; I mean while you were there.
r. FREEDMAN. It kept on diminishing.
enator NELSON. What was the maximum when you got there?
r. FREEDMAN. The maximum—why, 200.
enator NELSON. Two hundred clerks?
r. FREEDMAN. Yes, sir.
enator CALDER. In your department?
r. FREEDMAN. Yes, sir. Not in the requisition department, in superintendent's department, and about 50 in the equipment artment, which is connected with the stores department—that is, it 250.
enator NELSON. And then the requisition department, too, is a of it?
r. FREEDMAN. The requisition department—I can give you the ious departments of the stores department, if you want it, and tell how it is divided.
he CHAIRMAN. All right; go ahead.
r. FREEDMAN. The stores department consists of the requisition artment, the purchasing department, the service department, the traffic department, and connected with it, not directly, was equipment department, which was for the larger machinery or ipment.
enator NELSON. Did they have a superintendent for each of these artments?
r. FREEDMAN. They had a department head, a kind of assistant erintendent.
enator NELSON. For each one of these?
r. FREEDMAN. For each one of these; and they had four superinlents of the whole thing.
enator NELSON. At large?
r. FREEDMAN. At large; yes, sir.
enator NELSON. And then a special superintendent and assistant each of these departments?
r. FREEDMAN. Yes, sir.
enator NELSON. That made two for each?
r. FREEDMAN. Yes, sir.
enator NELSON. And then four at large?
r. FREEDMAN. Yes, sir. Eventually there was in one department the superintendent left, and he had no help; but he was still the erintendent.
enator CALDER. What brought about the reduction in the number nen?

Mr. FREEDMAN. Various conditions. I will give you the reasons. The first reason was that suggestions were made to the heads as to who apparently were not capable, about reductions that could be made and they acted on those suggestions.

Senator CALDER. Where did those reductions begin? Who made the suggestions, did you say?

Mr. FREEDMAN. I can give you the name of one man, so far as I know. I give you the possibility why they were reduced in the first place. The second possibility, which is more important, that they had to reduce something. The investigation was going on, so that they had to cut down somewhere. Remember that even though the stores department was muddled up, and thousands of material was wasted—which will come later—they did not discharge one inefficient department head; not one. They all held their jobs. The only men who were discharged to show reduction in expenses were the smaller men.

Senator NELSON. You say they commenced to make that reduction when the investigation started. Do you mean the investigation here by this committee?

Mr. FREEDMAN. Yes, sir; this investigation here.

Senator NELSON. Was that what started the reduction?

Mr. FREEDMAN. I could not say that positively. How do I know?

Senator NELSON. It did not occur before that?

Mr. FREEDMAN. No, no. I should say they were prompted to make the reduction; they were urged to make a reduction; they were compelled to reduce somewhere to show economy.

The CHAIRMAN. In your letter, Mr. Freedman, you say "The company officials actually did not avail themselves of genuine opportunity to remedy conditions that could be remedied."

Mr. FREEDMAN. Yes, sir.

The CHAIRMAN. "I will show why."

Mr. FREEDMAN. Yes, sir.

The CHAIRMAN. Now, will you show why?

Mr. FREEDMAN. Yes, sir. Of course, I have not finished my statement, but I will answer your question.

The CHAIRMAN. All right; go ahead.

Senator VARDAMAN. Go ahead and answer it.

Mr. FREEDMAN. Oh, yes; the "genuine opportunity" I had reference to is again the one man I had in mind; that is sufficient example, because the man is a very experienced man in that particular work. If you want his experience, I will give it to you. He tried again and again to get before them suggestions to remedy the rotten conditions which he evidently saw. I could not see them, but he saw them. You could not see them, but he saw them.

Senator VARDAMAN. Who is "he"—Mr. Holbrook?

Mr. FREEDMAN. Yes, sir.

Senator VARDAMAN. All right, go ahead.

Mr. FREEDMAN. Because his experience gave him the authority to see them. He is a critical man.

The CHAIRMAN. Why did they not remedy the evils?

Mr. FREEDMAN. They would not permit any interference; they considered themselves capable of remedying these things themselves. If *they* were not capable of putting them right in the first place, how *were they* capable of remedying them?

he CHAIRMAN. The question was, "Why did they not remedy evils?" And you have answered that they did not remedy them. understand that. But you seem to imply there was some reason they did not want to remedy and did not do it?
r. FREEDMAN. Yes, sir; I can give you my impression as to why you will see it is a good reason.
ne CHAIRMAN. All right.
r. FREEDMAN. My impression is that they did not want this man old any responsible position because he could expose too much of inefficiency; they realized this man was a brainy man.
r. VARDAMAN. Where is he now?
r. FREEDMAN. Now he is unemployed. He was the man who was me with me, but he fears he will be blacklisted, or something like

ne CHAIRMAN. Let us go on with these other items that you k of.
r. FREEDMAN. Yes, sir.
nator JOHNSON. You say he lived in Philadelphia?
r. FREEDMAN. He lived in Philadelphia; he is not connected with rmanent position; he is selling.
nator JOHNSON. What is his residence?
r. FREEDMAN. His residence is 1512 North Fifteenth Street. The s department heads are as follows: B. W. Harris, who is the tant to the works manager, but gets a bigger salary than his rior, who is the head of the stores and equipment departments.
nator VARDAMAN. What is he paid?
r. FREEDMAN. $12,000 a year, $1,000 a month—the head of the s and equipment—and he is assistant to the works manager, and works manager gets less than him.
nator NELSON. What pay does he get?
r. FREEDMAN. The works manager?
nator NELSON. No; this man who gets $12,000.
r. FREEDMAN. $12,000 a year.
nator NELSON. What is his name?
r. FREEDMAN. B. W. Harris.
nator NELSON. Where did he come from?
r. FREEDMAN. Originally?
nator NELSON. Yes.
r. FREEDMAN. He came from Minneapolis.
nator NELSON. Yes; I thought so. [Laughter.]
nator JOHNSON. Did he have a brother there, too?
r. FREEDMAN. Yes; he had a brother there, too. He is the head e equipment department.
nator JOHNSON. What does he get?
r. FREEDMAN. He gets $800 a month—$200 a week.
nator JOHNSON. One gets $1,000 a month and the other gets $800?
r. FREEDMAN. Yes, sir.
nator RANSDELL. Is he from Minneapolis, too? [Laughter.]
r. FREEDMAN. Yes; they both made money in the equipment busi- in Minneapolis, as you know, Senator.
nator NELSON. I never knew him. One of them came over here offered his services to enlighten the committee, but after I found what salary he got and the work he was doing I did not care for [Laughter.]

Mr. FREEDMAN. Yes, sir.

Senator NELSON. He was going to demonstrate how valuable his services were and what a sacrifice he had committed in leaving Minneapolis and coming over to Hog Island and getting this salary.

Senator RANSDELL. He was probably getting $25,000 over there in Minneapolis.

Mr. FREEDMAN. Senator, in reply to that, these men who are getting big salaries down there are still drawing their shares in their business, so these salaries they are getting are extra.

Senator NELSON. What are these two men doing there—these two Harrises?

Mr. FREEDMAN. B. W. Harris is assistant works manager, as I said before, and he is the head of the stores and equipment department: his brother is head of the equipment department.

Senator NELSON. In the same branch of the service?

Mr. FREEDMAN. Practically the same department.

Senator NELSON. The equipment department is a branch of the stores department?

Mr. FREEDMAN. It is connected—a separate department, but it is connected closely.

Senator NELSON. What are their duties?

Mr. FREEDMAN. I am not capable of giving you in detail their duties. I can tell you they are responsible for those departments.

The superintendent of the stores department direct is Mr. Lynch: the superintendent of the equipment department direct is Mr. Harris, jr.

Senator NELSON. What pay does he get?

Mr. FREEDMAN. $400. Lynch comes also from Minneapolis. The head of the stores department was Lynch, and he got $100 a week. The immediate head of the equipment department was raised, and he got $200 a week; and the head over both of them is B. W. Harris, who got $1,000 a month.

Senator NELSON. A pretty good combination.

Mr. FREEDMAN. Yes, sir; a fine combination. Not only these, gentlemen, but another man I can give you in our department——

Senator JOHNSON (interposing). Just pardon me, about those salaries. Are you certain of the salaries these men received?

Mr. FREEDMAN. If I am not certain, I have underestimated them, probably, and they get more than I said; I am not certain.

Senator JOHNSON. I notice in the statement furnished us by the American International Co., J. E. Lynch, assistant superintendent of stores, gets $400 per month.

Mr. FREEDMAN. Yes, sir; I said that—$100 a week. I stated that.

Senator JOHNSON. L. B. Harris, $625 per month.

Mr. FREEDMAN. That is Leo Harris. I overestimated him a trifle there when I said $800 a month. The statement in the newspapers gave it as $800 a month. I wanted to say that.

Senator JOHNSON. And the other is $1,000 a month.

Mr. FREEDMAN. Yes, sir; $1,000 a month. The superintendent of the purchasing department, gentlemen, the man responsible for purchasing hundreds of thousands of dollars' worth of material was a soap salesman.

Senator VARDAMAN. Where is he from?

r. FREEDMAN. I will not say he is from Minneapolis. [Laughter.]
enator VARDAMAN. Where is he from?
r. FREEDMAN. I do not know. He worked for a large soap firm eight years.
enator JOHNSON. What is his name?
r. FREEDMAN. George E. Fowler.
enator NELSON. Were those men you refer to a part of the Stone ebster concern or the company force that they imported there?
r. FREEDMAN. The men are either of the Stone & Webster gang riends of the Stone & Webster, either one or the other; I am in saying that.
enator JOHNSON. George E. Fowler is described as warehouse man.
r. FREEDMAN. He has held two jobs since then.
enator JOHNSON. And as receiving $200 a month.
r. FREEDMAN. He has been transferred twice since then to better . He was a soap salesman before.
enator JOHNSON. It says he was eight years salesman for Procter amble.
r. FREEDMAN. Yes, sir; that is right. He was selling Ivory soap.
enator RANSDELL. Do you know what he received in the way of ry when he was a soap salesman?
r. FREEDMAN. I know that he got much less than he did before. was on a commission basis before. Every man there got less, I want to tell you, much less, and when it says a man got more re than he is getting now it is misleading. I will tell you what ean. You find a man who patriotically accepts less now than ot before and he is in a better position than if he got 100 per more, because he is still getting his share from his business is still running. For instance, if he got $200 a week in his business, and he gets $100 a week down at Hog Island, that is crifice, is it not? But he is actually getting $300 a week. I give names. I will repeat a thousand times what I am saying here. , Senators, when the gentleman refutes my statements here I you would call me again, because I will have the whole Inter- onal lined up against them and they could not deny the truth. are shrewd, clever men. If you go down there on Monday will find they are clever men; the surface will be prepared you; the scenery will be prepared for you on Monday. You a man with you who can rip that surface open and show you ath; that is what you want.
nator VARDAMAN. You think we ought to have somebody who tear away the camouflage?
r. FREEDMAN. Yes, sir; and I know a man who can tear away the uflage, and that is Holbrook. Of course, they are not fools; are experienced men, many of them, they know how to handle ituation; they have improved a little, but there is still plenty to . We are not concerned with what happens now. I am con- d with the original—what happened a month ago. That is you are concerned with. Of course, they can improve it now. have to improve it to save their skins.
e CHAIRMAN. The list gives George E. Fowler, warehouse fore- as getting now $200, and formerly employed at $150.

Mr. FREEDMAN. That is an increase, a big increase; that is a patriotic increase. [Laughter.]

The CHAIRMAN. You say he has been still further advanced since this list was made?

Mr. FREEDMAN. He has got an advanced position. I do not know whether he has got an advanced salary since he was warehouse foreman, in which he had had no experience. He was promoted to purchasing agent, also in which he had had no experience.

The CHAIRMAN. Who was the purchasing agent that he succeeded?

Mr. FREEDMAN. Mr. Dunn was the purchasing agent whom he succeeded, and Mr. Dunn was promoted to assistant to Mr. Lynch, and Mr. Dunn is a Stone & Webster man. Mr. Dunn would not permit any interference, and he would not permit any suggestions. He will take suggestions if he thinks they will help him, but he will not employ experienced men who are not the friends of Stone & Webster men.

Senator NELSON. Have they done any dredging up there?

Mr. FREEDMAN. Dredging?

Senator NELSON. Yes.

Mr. FREEDMAN. I do not know anything about that. I have not finished my talk either. I want to be brief, but if I am interesting you, I will stay here as long as you want me to.

The head of the requisition department when I came was Ranier. He is in business for himself; he was before he came, and still is, in the plumbing supply business, and his firm gets a whole lot of orders from the American International.

Senator VARDAMAN. What is his name?

Mr. FREEDMAN. Ranier.

Senator NELSON. He is chief requisition clerk?

Mr. FREEDMAN. Yes, sir; now, he resigned; he realized he was inefficient, and his friend, who was a fire-insurance salesman, got the job. If you want me to, I will give you the reason that he gives—the fellow that lives on the same street in Hog Island—he said, "It is to get out of the draft and to get business for my firm." That is the reason he gave himself. Of course, I would not say every man working there of military age took employment there to get out of the draft. I do not want to be personal. I will proceed. The traffic manager there was a stenographer and his brother was a vacuum-cleaner salesman, and is now material man.

Senator VARDAMAN. What does he get?

Senator JOHNSON (interposing). What is his name?

Mr. FREEDMAN. Strange to say, the names are Baldwin—Brothers Baldwin—but they are not connected with the other Baldwin.

Senator VARDAMAN. What does he get?

Mr. FREEDMAN. The traffic manager was a stenographer in a railroad office. You know what he gets, Senator; I can not say—about $200.

Senator JOHNSON. I see here that C. W. Baldwin is described as assistant storekeeper in charge of checking cars; is that one of them?

Mr. FREEDMAN. He calls himself traffic manager.

Senator JOHNSON. He gets $225.

Mr. FREEDMAN. They have all kinds of titles.

Senator JOHNSON. Was assistant to general manager of the Mid-est Refining Co., stenographer and clerk for the Philadelphia & ading and the Texas Co. for 12 years?
Mr. FREEDMAN. Yes.
Senator JOHNSON. That is the description here?
Mr. FREEDMAN. Yes, sir; Senator, those descriptions, as you know, e prepared by the men themselves.
Senator JOHNSON. They are biographies?
Mr. FREEDMAN. Yes; they are biographies of themselves. A man is ing to give a mighty good description of himself.
The CHAIRMAN. All right. Go ahead.
Mr. FREEDMAN. His brother is now material man—responsible for aterials—and supposed to be an expert on materials—stuff that the nited States Government pays for. He was a vacuum-cleaner sales-an before he came there. His name is not in there—he does not get much, but you can rest assured he gets more than he did before.
Senator VARDAMAN. Do you know what he gets?
Mr. FREEDMAN. No. I should estimate $30 to $35 a week. He is e of the lesser fry. The thing I wanted to point out to you gentle-en is this: Why is it that young men with no experience become partment heads and a man of 45 years—a man with valuable ex-rience—they have no room for him there? Why is it? I know hy.
Senator VARDAMAN. Answer it.
Mr. FREEDMAN. Because he is not a friend of the Stone & Webster ng.
Senator NELSON. Have there been a lot of young men come in ere to get rid of the draft?
Mr. FREEDMAN. I would not say every young man is there to avoid e draft, but those things are possible. But you would think that e men at the head would give preference to men out of the draft, nsidering the others would be expected to be called.
I will proceed further. I will come to this—this is going to spike eir guns. This is a spike [referring to iron spike on committee ble]. This is the most important piece of evidence I have here. is a piece of Hog Island. Of course, there were a couple of ex-rienced men in the stores department. There are a few experienced en there: we do not doubt that. I am giving you some of the akest ones.
Senator NELSON. What did they use that spike for?
Mr. FREEDMAN. I do not know.
Senator NELSON. What is the matter with it?
Mr. FREEDMAN. Nothing; it is in good condition.
Senator NELSON. What is the other?
Mr. FREEDMAN. This is a bolt and nut [exhibiting the same to the nmittee).
Senator NELSON. Is there anything wrong with them?
Mr. FREEDMAN. No; they are in good condition, too.
Senator NELSON. What did you bring them along with you for?
Mr. FREEDMAN. I will tell you. I will skip the other stuff and tell u now. I was coming to that.
Senator JOHNSON. Let him go on with the rest. Go on and reach it.

Mr. FREEDMAN. The storehouses were very crowded and material was piled up outside, exposed to the weather. Material that could have been used right away was in the storehouse and the material that may not have been needed for three or four months was piled up outside. There were possibilities of much material having been stolen. The possibility was there. I could tell you that a man said to me that he knew somebody had stolen it, but that is not definite. But there is possibility of much material being stolen. A whole lot of lumber, I understand, was stolen because of the poor system. If you telephoned to Hog Island to-day and asked them how many round-point shovels they have there, or if you asked them how many No. 25 bolts they have there, they could not give you an answer to-day. If you should telephone to the Simmons Hardware Co., or if you telephoned to any other company that is established, they would give you an answer. And it is not because the thing is large. The Woolworth Building is large; it needed so much more material, and they could tell you. That is not the reason. It is because the system is wrong. It is not because the operation is large that they can not tell you what material is there. They ought to know what material is on the island. They can not tell you that. They will give you some figures, but they would not be correct because they have not got the proper system down there.

I will tell you about this, Senator Nelson—this spike.

Senator JOHNSON. I find in this list T. A. Carr, works manager, $833.33 a month.

Mr. FREEDMAN. Yes, sir.

Senator JOHNSON. And then I find a little further the assistant works manager, who gets $1,000 a month.

Mr. FREEDMAN. I think I can defend that, Senator.

Senator JOHNSON. You can "defend" it?

Mr. FREEDMAN. Defend it. I would not go by those figures as showing something wrong. The figures would not prove anything wrong, to my mind.

Senator JOHNSON. The assistant gets a good deal more than the head?

Mr. FREEDMAN. I will tell you why. Somebody must be works manager. The man is not assistant to him directly. The title might be assistant works manager; but he himself, the man whose title is "assistant," may be an expert along a certain line that the works manager is not, and therefore he is entitled to a larger salary.

Senator VARDAMAN. What is the use of the principal, then, if he has a man under him drawing a larger salary and doing the work?

Mr. FREEDMAN. I say that you are right—there is no use. I wanted to defend him, where credit is due, but to my mind the works manager is only a figure; that is why he gets less. He is only a figurehead.

Gentlemen, this spike [indicating] represents $1,000,000 of material; $1,000,000 is not an exaggeration, because you will find the United States Government paid more than $1,000,000 for the material, tools, and supplies, and other things. This spike [indicating], Senator Nelson, represents $1,000,000 worth of material that the United States Government is paying for.

Senator NELSON. Which has been on the ground there?

Mr. FREEDMAN. I will tell you why it is here, if you will permit me to explain. This material that the United States is paying for is iron and steel and wood made up into different tools, and this is one of them. If any one of those men had their own business and it was money out of their own pocket, they would not let it be wasted, would they? And because the United States Government is paying for it the indifference is there—not the individual indifference; the indifference of the system is there. I would not accuse any individual of being indifferent. This spike was picked up out of the track of an automobile truck by me, and so was this bolt. It is really stolen, but I will return it to the United States. But let me assure you, gentlemen, that a thousand men on that island who were there could have taken out an equal amount to this—1,000 men. I repeat that; that is no exaggeration. In other words, I would be willing to take off the stuff that is being strewn around the island in place of a year's salary. I would be willing to do it. Why? Because the proper accounting of material is not kept.

The CHAIRMAN. You mean that was dropped out of a truck?

Mr. FREEDMAN. It was not dropped out of a truck, but it was trewn around like other material. If a contractor wants certain aterial he will order 200, while he might need 180, and the other 0 is thrown anywhere.

Senator NELSON. Do they never keep a record of materials reeived?

Mr. FREEDMAN. They do keep a record of materials received, aparently.

Senator NELSON. Did they never keep a record of materials thrown ut?

Mr. FREEDMAN. On paper they do; but not actually.

Senator NELSON. They never accounted for them?

Mr. FREEDMAN. They did on paper. They can show you that they id, but the facts are that the record was not kept properly. They ave a record, certainly. They are not fools.

Senator NELSON. Did they not receive the quantity that the records how they had? Was there any discrepancy between the records and he actual receipts?

Mr. FREEDMAN. They received naturally as much as they ordered; f course, they did.

Senator NELSON. And that was put on the record?

Mr. FREEDMAN. And that was put on the record; yes, sir.

Senator NELSON. So that they have got everything they received on he record.

Mr. FREEDMAN. Yes, sir; they would not receive it if it was not on he record.

Senator NELSON. Did they put down everything they received on he record?

Mr. FREEDMAN. Yes; after a style, they did.

Senator NELSON. What became of the other, then—the shortage?

Mr. FREEDMAN. Now, I will answer: A contractor would order certain material that he wanted, and instead of ordering just the mateial he wanted he would order a large stock order, things that may ever be used, and then, even when material arrived, it did not go irectly to that contractor, any more than one case where some other

contractor got hold of it and the important job was delayed. Material disappeared overnight.

Senator VARDAMAN. Have you any knowledge of whether or not an inventory is taken of these things at any time?

Mr. FREEDMAN. It is safe to say that an inventory is taken, or is supposed to be taken. No business man would admit that he is not taking an inventory, and they would not admit that they had not taken an inventory. Of course they are taking it. I am getting you evidence. I presume from their standpoint they have evidence that would look mighty good. I am giving you sufficient evidence that the records were not good.

Of course the order system has been changed. They have continually made improvements, but the same men who put in that system are the men making improvements. I have not yet seen one department head to be dismissed. It appears there is an agreement that all the bigger men must stay there.

If you want to read it—I do not want to give it to you, because there is not time, but if you want to read it I have a statement here by the works manager, the man in charge of the whole proposition, Mr. Carr, who made this statement to the department heads about conditions that he observed.

Senator NELSON. When did he make it?

Mr. FREEDMAN. He made this statement about a month ago.

Senator NELSON. Have you got it here?

Mr. FREEDMAN. I have it here.

Senator NELSON. Is it long? Go on and read it.

Mr. FREEDMAN. I will read it, if you want me. This will defer it, and it will give you information that you want, too.

Senator NELSON. Or you can put it into the record, whichever you think best.

Mr. FREEDMAN. I will give it to you. You may want to ask me something about it.

Senator NELSON. Go ahead and read it.

Mr. FREEDMAN (reading):

Copy of remarks made by Mr. Carr at Wednesday's conference.

On yesterday morning I went over the entire job, because it was a muddy and disagreeable day.

Gentlemen, the works manager of this complete organization is talking. You use your own judgment.

Senator NELSON. Is that his language?

Mr. FREEDMAN. This is his language; he is talking—the works manager of the whole proposition is talking.

Senator NELSON. Go ahead, and tell us what he is saying.

Mr. FREEDMAN (reading):

On yesterday morning I went over the entire job because it was a muddy and disagreeable day. I wonder how many of you men interest yourselves to go around this job. There are very few. I have talked with you about these things before, and I am now forced to repeat them.

In the first place I found a garage belonging to an individual with an individual's automobile in it, and some of our employees working on the automobile and drawing Government money for same. How can I justify this?

I found buttons in the engineer's office by the bucketfull, as well as in the time offices, without any guards around. These buttons can be taken away in great quantities. This is gross careless don't-give-a-damnativeness.

I found wall board on the floor of shacks put there to keep feet warm. I also found this in the saw-file house.

I noticed that in construction the temporary furniture, the legs of same were being tapered, which is an unnecessary expense, and this must be cut out, as it is a gross waste of Government money. Spending Government money is like spending our own money. This is Liberty loan money for which you and I subscribed.

I do not know how you can justify these things if you are called upon to explain. You can not justify it. You men are here to run this job. You are responsible for it.

I found stationery scattered all over the job, and being used for scratch pads, etc.

These are small things, and the greatest exhibit of inefficiency I ever saw in my life is right here on this job. It is inefficiency personified.

I found the cement uncovered, and have listened to your remarks about this. Yesterday morning I was along the fence and saw cement scattered all around and the cement was only half covered with tarpaulins. It lay out in the rain all last night. Certainly somebody should see to these things. It may not be your particular end of the game to attend to things like this, but it is your business to do so.

There were no traffic police from Black's saloon to the administration building. I found machines four deep, so that no one could get out of the island.

Dynamite has been permitted around this building [illegible] a whole wagonload in front of the administration [illegible] Mr. Andrew had to go out and order it removed.

I noticed some heads of departments coming on the job [illegible] 10 a. m. There may be a reason. [illegible] suffer should you go on to fight the matter. [illegible] terday when the bridge was blocked some men [illegible] 10 miles out of the way and [illegible] in their minds—to deal with the job.

Have any of you men been in the Y. M. C. A. [illegible] Mark the Y. M. C. A. You should [illegible] disgrace. Go now it is.

How many of you have gone in shacks on the job [illegible] men and lumber shovers who are [illegible] they should be out directing the men. [illegible] foremen are permitted to do that.

What is going to happen to the [illegible] appears to make it look like a [illegible]

Carpenters are being hired [illegible] while men.

Look at the piles of lumber [illegible] lumber are all over the job [illegible] Every stack of the job has a [illegible] put wood out in the free.

Some of the [illegible] to one [illegible]

Was anything done [illegible]

Property owners are [illegible] and myself should show [illegible]

None of you men [illegible] Transportation [illegible] refuse to [illegible] your orders.

I learned yesterday that [illegible] Black's saloon, where [illegible]

Why don't you [illegible] as possible?

This is the satisfaction [illegible]

I want to tell you [illegible] big and also [illegible] inspection in Washington [illegible] officials of the Government [illegible] over the place. [illegible]

We should strive to cultivate a better feeling between ourselves and the Government, the newspapers, and visitors. Each one of you must admit this is the truth. You see an error and do not attempt to remedy it. By so doing you are aiding the enemy.

Gentlemen, let us start anew and go out of here with a determination to whip this job into shape.

Senator NELSON. Who was this who made this speech?

Mr. FREEDMAN. The works manager of the entire plant.

Senator NELSON. What is his name?

Mr. FREEDMAN. Mr. Carr; already given.

Senator NELSON. Who did he make these remarks to?

Mr. FREEDMAN. He made these remarks to the department heads.

Senator NELSON. And was it in writing?

Mr. FREEDMAN. He made these remarks verbally, but the stenographer made a copy of it and had numerous copies printed, and many of the clerks received it, in addition to the department heads.

Senator NELSON. And that is one of the copies?

Mr. FREEDMAN. That is one of the copies.

There is one thing I want to say, gentlemen, that on one occasion, at least, the department head would rush through the room and say, "Somebody is coming down from Washington. Look busy. Get the desks tidy." See? For appearance's sake. I just make that statement of facts.

Senator NELSON. They will be apt to do that on next Monday.

Mr. FREEDMAN. They will do more than that. They have a week's preparation for all that sort of thing. They will have a beautiful picture for you next Monday; yes, sir.

Senator RANSDELL. You would advise us to stay up there more than one day if we would find anything, do you not?

Mr. FREEDMAN. And in addition to that I would advise you to have the right man along with you.

Senator RANSDELL. How many days do you think we would have to stay there in order to get a correct impression of what is going on?

Mr. FREEDMAN. You will never get a correct impression, because the influence around you will be too much for you.

Senator VARDAMAN. Why should it be too much?

Mr. FREEDMAN. I am not suggesting you would be influenced, Senator, because you would not; but it is impossible for you to be impartial if you have not the other side.

Senator NELSON. I can see from what has appeared here to-day why Mr. Baldwin was so eager to tell us the other day they had laid a keel. That keel has been laid on a way that is not completed.

Mr. FREEDMAN. No; it is not completed. I saw the way myself.

Senator NELSON. It is just enough so he could come down here and say they had laid that keel; that is all?

Mr. FREEDMAN. I believe that. I saw the keel; I saw the ways.

Senator NELSON. Just enough so he could come down here and say he laid one keel.

Mr. FREEDMAN. Gentlemen, I ask you what is laying a keel? What does it represent? Is it putting a few pieces of iron and starting to lay a keel? Anybody can put a few pieces of iron together. I can lay a keel in this room. I am only trying to support what the Senator says; I am not trying to knock. I could lay a keel on this table.

ere are some records there which will show evidence of mis-
ıgement in spite of the covering up, if they are pulled apart, if
are shown to you.
w, gentlemen, I am ready to answer your questions.
nator JOHNSON. The obvious query, Mr. Freedman, is why you
such an interest in this proposition and come here at your own
nse to make these disclosures. I wish you would state, please,
motive, if any, you have in the matter.
. FREEDMAN. Yes, sir. There are two motives, Senator, and your
ment must decide which is the biggest motive. The one motive
at I feel it my duty to come here and say what I in my own
have observed. That is my one motive; call it patriotic duty
ıll it anything. The other motive is that I felt an injustice
done to a man of great ability down there, and perhaps that
tice would be remedied. Incidentally I may benefit myself in
way. You might say I have a selfish object.
nator JOHNSON. What do you mean by "benefit myself"?
. FREEDMAN. Well; if this gentleman that I have reference to,
was mishandled, could get a position down there that he could
hat he would give me a position that I could fill. I am giving
because it is bound to occur to you, but really I give that hesi-
gly, because it just occurred to me now—about a personal motive.
I it my duty to be here; that is the main reason.
nator JOHNSON. Have you had any difficulties, any rows, or any
ıle of any sort with the management at Hog Island?
. FREEDMAN. Only after I decided to testify; not before.
nator JOHNSON. Up to the time you decided to testify, had you
in any difficulty there at all?
. FREEDMAN. No; not at all.
nator JOHNSON. Had you had any before with anybody that was
superior, anybody connected with the American International?
. FREEDMAN. No, sir; not until I decided to testify.
nator JOHNSON. Have you at any time made any request for
er wages or for an advance in position?
. FREEDMAN. Yes, sir.
nator JOHNSON. When?
. FREEDMAN. The first week I came there I wanted a dollar and
f a week more, especially as most of the men there were getting
big slaries, and even that would be less than I had before. But
s satisfied when it was turned down.
nator JOHNSON. When was that request made?
. FREEDMAN. The first week I was there—the second week.
nator JOHNSON. After that time, did you ask for any increase in
s? Did you make any request?
. FREEDMAN. Only when the department head resigned. I asked
epartment head who succeeded him. I said the department head
promised it to me, which he had, and I asked him if he would
it up for me.
nator JOHNSON. I could not hear your last statement. When
t that you made any request to be promoted to a position?
. FREEDMAN. I did not make any request for promotion.
nator JOHNSON. What request did you make to the department
that you were speaking of?

Mr. FREEDMAN. I asked him for an increase of a dollar and a half per week, to $25, inasmuch as $29 seemed to be the salary. I wanted $4 less than that.

Senator JOHNSON. You said that was the first week?

Mr. FREEDMAN. The second week I was there.

Senator JOHNSON. Then, I understood you to say you made some other request on the management, did you not?

Mr. FREEDMAN. Regarding this gentleman who was not recognized, not on my own behalf.

Senator JOHNSON. You spoke of some promise that had been made to you?

Mr. FREEDMAN. Yes.

Senator JOHNSON. What was it?

Mr. FREEDMAN. The first request that I made for an increase was admitted by the department head. In other words, he agreed he would try and get it for me.

Senator JOHNSON. And subsequently?

Mr. FREEDMAN. Subsequently nothing was done. Then I repeated my request to his successor.

Senator JOHNSON. What was the result?

Mr. FREEDMAN. I waited patiently about a month, and when nothing was done I said to his successor, "Mr. So-and-So promised me an increase; could you try and get it for me?" Being a family man, $23.50 was not quite enough to live on.

Senator JOHNSON. What was said then?

Mr. FREEDMAN. He said, "I will go and try and get it for you."

Senator JOHNSON. Did you get it?

Mr. FREEDMAN. He came out and said, "On account of the way things are now—economies and investigations and everything else—we are not making any increases at all." So I was perfectly satisfied.

Senator JOHNSON. Was there any other matter of difference of any sort at any time between you and the management there?

Mr. FREEDMAN. Yes, sir; after I decided to go to Washington.

Senator JOHNSON. I mean before that time.

Mr. FREEDMAN. Before that time, no; there was no difference at all. Everything seemed to be O. K. so far as I was concerned.

Senator JOHNSON. How did you notify your superiors that you were going to come down here and testify? Did you say it to them verbally, or did you write it, or how?

Mr. FREEDMAN. I wrote a note to Mr. Carr—I wrote a note to the works manager of the island, and I stated I expected to testify at Washington. He has the note there.

Senator JOHNSON. And when was that note written to Mr. Carr?

Mr. FREEDMAN. The note saying that I expected to testify in Washington was written after I had written the letter to you.

Senator JOHNSON. Have you a copy of that note?

Mr. FREEDMAN. No; but I notice also I have to give you the names of men who have to testify on padded pay rolls, and I can send you a copy.

Senator JOHNSON. Did you retain a copy?

Mr. FREEDMAN. I retained copies of the letters, but not of the notes. The note was very brief.

Senator JOHNSON. The note you sent to Mr. Carr you say was very brief?

Mr. FREEDMAN. Yes; he has the note.
Senator JOHNSON. Substantially, what did it say? I do not ex-
:t a verbatim repetition, but substantially what did it say?
Mr. FREEDMAN. Now that you ask me, that note was sent to B. W
ırris, not to Mr. Carr—it didn't make any difference.
Senator JOHNSON. What did the note say, substantially?
Mr. FREEDMAN. The note said: "I expect to testify at Washing-
ı this week, and inasmuch as my testimony concerns the stores
partment, I would like to see you and get your advice," or some-
ıng like that.
Senator JOHNSON. Did you see him?
Mr. FREEDMAN. I saw his secretary, because he was not there, and
never saw him—that is, I never saw him through that note, be-
ıse I was discharged after that.
Senator JOHNSON. Did you talk to his secretary about the note?
Mr. FREEDMAN. Yes.
Senator JOHNSON. Did you convey to the secretary or to Mr.
ırris at any time any threat about what you would do here?
Mr. FREEDMAN. No; but I did see Mr. Harris after I was dis-
arged.
Senator JOHNSON. And did you talk to Mr. Harris then?
Mr. FREEDMAN. I then talked to Mr. Harris, and he said, "You
e making a threat to me that you are going to Washington?" He
ıde that statement to me.
Senator JOHNSON. What did you say?
Mr. FREEDMAN. I said, "No; there was no threat intended."
Senator JOHNSON. In writing to these people or in talking to them,
l you at any time tell them what you would do to them?
Mr. FREEDMAN. No; I would not be so foolish.
Senator JOHNSON. Did you make any suggestion at any time of
y character that if they would do something for you or to you,
u would not testify?
Mr. FREEDMAN. No; positively no.
Senator JOHNSON. Nothing of that sort?
Mr. FREEDMAN. No; positively no. They themselves said to me—
ey said, "Why, are you making a threat that you will go to
ashington if we don't do this for this man?" That is what they
id, but it was not correct. And as far as I am concerned myself,
ere was nothing at all connected with myself, because it did no
rm to me. I had no complaint against them.
Senator JOHNSON. To whom were you speaking concerning this
ın Holbrook that you mentioned?
Mr. FREEDMAN. I first spoke with Mr. Lynch, the immediate
the stores department.
Senator JOHNSON. What did you say to Lynch?
Mr. FREEDMAN. I said, "Mr. Lynch, do you realize that there is a
ın in our department working as an order clerk who has had four
ars' experience as superintendent of contracts and has been in
arge of stores in a large hardware house, and also has been two
ars with an efficiency concern? And, Mr. Lynch, I believe this
ın, if you see him, will be of assistance to you." That is what I
id to Mr. Lynch.
Senator JOHNSON. Is that the substance of it?
Mr. FREEDMAN. *That is the substance of it.*

Senator JOHNSON. What did Mr. Lynch say to you?

Mr. FREEDMAN. Mr. Lynch said, "You go get your time," he said; "I won't have any man coming in telling me how to run the stores." He fired me on the spot. But I knew he didn't mean it; I knew he had lost his temper. So I said to him, I said, "I am not here for my own interest. I did not intend to hurt your feelings, but this man is what I claim him to be, and I think it will be to your advantage to see him." That is what I said to him.

Senator JOHNSON. Were you discharged by Mr. Lynch?

Mr. FREEDMAN. No; he forgot about that. He did say, "Go and get your time, for telling me how to run things."

Senator JOHNSON. With whom else, if anybody, did you have any conversation about Mr. Holbrook?

Mr. FREEDMAN. Then, after a week or so, after Mr. Holbrook had seen Mr. Lynch and Mr. Lynch did not give him any consideration. I was still determined to have the men higher up know about this man Holbrook, because I knew he was a man of great ability; so I went to the works manager, Mr. Carr.

Senator JOHNSON. What occurred between you and Mr. Carr in relation to Mr. Holbrook?

Mr. FREEDMAN. Why, first I went to the assistant to Manager General Goodenough at Hog Island, not to Mr. Carr. I then went to Mr. Carr a week later.

Senator JOHNSON. Did you see Mr. Goodenough?

Mr. FREEDMAN. Mr. Goodenough is never at the island; he is down at North Broad Street. I went to his assistant.

Senator JOHNSON. Did you talk to his assistant?

Mr. FREEDMAN. Yes; I talked to his assistant and told him about Mr. Holbrook. He says, "Well, possibly the superintendent has made a mistake." I talked to his assistant, because I wanted to see Mr. Carr, and Mr. Carr was not present, so I told it to his assistant.

Senator JOHNSON. Did you tell him substantially what you had told Mr. Lynch?

Mr. FREEDMAN. Yes; I told him substantially what I had told Mr. Lynch and what transpired.

Senator JOHNSON. What did he say finally?

Mr. FREEDMAN. He said he was thankful that I came there; he appreciated my coming there. And he said, "I would rather that Mr. Holbrook took that up direct with Mr. Goodenough than take it up with Mr. Carr."

Senator JOHNSON. Whom next did you see about Mr. Holbrook?

Mr. FREEDMAN. Then I saw Mr. Carr.

Senator JOHNSON. Why were you seeing these people concerning Mr. Holbrook?

Mr. FREEDMAN. Because Mr. Holbrook was not on the island at that time.

Senator JOHNSON. Where was he?

Mr. FREEDMAN. He has been discharged in the meantime, and he could not get on the island, and I acted on my own behalf—he didn't ask me to act for him.

Senator JOHNSON. When had he been discharged?

Mr. FREEDMAN. He was discharged before I spoke to Mr. Carr or to Mr. Goodenough's assistant.

Senator JOHNSON. Had he been discharged when you spoke to Mr. nch?
Mr. FREEDMAN. Since I spoke to Mr. Lynch he was discharged—t by Mr. Lynch, no; by his head of department.
Senator JOHNSON. Was the reason stated for his discharge?
Mr. FREEDMAN. The department head gave him one reason and the partment head gave the superintendent a different reason.
Senator JOHNSON. What was the reason for his discharge?
Mr. FREEDMAN. The department head told him that they were lay-; off men, and inasmuch as he was the last man taken on he would the first man laid off.
Senator JOHNSON. And then you interested yourself to get him ck. That is the fact, is it not?
Mr. FREEDMAN. Yes; that is the fact.
Senator JOHNSON. And you went to these various people, with the a of getting him back to his work there?
Mr. FREEDMAN. Not to the work that he was doing.
Senator JOHNSON. You wanted him in a different position, that uld be a more responsible position?
Mr. FREEDMAN. The one thing that I asked for was that the man given a hearing. I couldn't ask them to take him back.
Senator JOHNSON. I got the idea from the first part of your testi-ony that you were interesting yourself in Mr. Holbrook because r. Holbrook was such a very efficient man.
Mr. FREEDMAN. Yes, sir.
Senator JOHNSON. Was it because of that or because he was dis-arged and you were trying to get him back?
Mr. FREEDMAN. No; because he was a very efficient man. Inci-ntally I would have liked to see him get back.
Senator JOHNSON. How long had you known Mr. Holbrook?
Mr. FREEDMAN. Only since he came to the yard, about a week ter me.
Senator JOHNSON. Was there any understanding between you and r. Holbrook as to what would be done for you in case you got Mr. olbrook back?
Mr. FREEDMAN. No, sir; there was no bargain of that kind made. e said to me, before I made any effort on his behalf, "I think you e an intelligent fellow," he says, "and some day I hope to give you good position." I made no bargain with him, because I acted with-t his consent.
Senator JOHNSON. Was he not familiar with the fact that you were ing these things on his behalf?
Mr. FREEDMAN. After I did them he was familiar.
Senator JOHNSON. But beforehand?
Mr. FREEDMAN. No, sir; he didn't know I was doing them for him. e didn't want me to.
Senator JOHNSON. Were you resentful about his discharge?
Mr. FREEDMAN. Not exactly; I wouldn't say I was resentful; I was rprised. I would naturally be a little resentful.
Senator JOHNSON. Have you such a resentment now against these periors of yours at Hog Island that it prompts you to come down re and testify?
Mr. FREEDMAN. No; not at all. I have no resentment against em. I think they are sincere men, except they are incapable.

Senator JOHNSON. Did you come here at your own expense?

Mr. FREEDMAN. Yes, sir.

Senator JOHNSON. And you came here without solicitation f anybody?

Mr. FREEDMAN. No solicitation of any kind. I went to the ed of the Bulletin, because being a family man and being on exp I says to him, "Would you pay my expenses if I go to Washin and testify in the interests of the public?" He says, "Sur But I have not taken advantage of that, because I didn't give t a statement before I came over here.

The CHAIRMAN. Do you think matters have improved there cently?

Mr. FREEDMAN. Of course, they have; there is no doubt about t Why shouldn't they be improved? The men are doing their best

Senator NELSON. They have discharged a lot of men there lat

Mr. FREEDMAN. Yes, sir; they discharged a lot of the minor me

Senator NELSON. How many have they discharged, do you thi within the last two or three weeks?

Mr. FREEDMAN. I can not say regarding the island in general, cause there are so many mechanics that I don't know anything ab They have the figures there.

Senator NELSON. But as to that branch of the service that you familiar with?

Mr. FREEDMAN. In the clerical department half of the men h gone; more than 50 per cent of them have gone.

Senator NELSON. Have they enough left to do the work with?

Mr. FREEDMAN. Apparently they have enough left to do the w with.

Senator NELSON. So before that they had twice as many as t needed?

Mr. FREEDMAN. Yes, sir; positively. They had more than tw as many as they needed.

Senator NELSON. And what was the average pay of these clerks

Mr. FREEDMAN. Why, the average pay of the clerks was $2 week. Many of them got $29 a week for the same work, and oth not $22 a week.

Senator NELSON. The average was about $25?

Mr. FREEDMAN. I should say the average was about $25. They h the exact facts there.

Senator VARDAMAN. I want to ask you this bluntly: Is the mot the controlling motive, of this testimony which you have given behalf of Mr. Holbrook and the interest you have taken in the ma of his discharge due in any way to a desire on your part to rec a favor from him if he should be reinstated?

Mr. FREEDMAN. It is not due to that. Incidentally he may fa me at some time, because I really have rendered him a service. that is not my controlling motive; I would not say that. I felt injustice had been done that man. The reason I acted in his bel was if I was discharged I would do nothing, but if he was charged, he is a man of ability and experience, and they are supp to be short of brainy men.

Senator VARDAMAN. So this statement is made without any bi

Mr. FREEDMAN. Of course; without any bias.

ator VARDAMAN. Either because of his mistreatment or your of reward?

FREEDMAN. Positively without any bias.

ator VARDAMAN. Very well; that is all.

CHAIRMAN. We are very much obliged to you, Mr. Freedman. ator Phelan has written me a letter, forwarding a copy of a am from Mr. Harry Chandler, of Los Angeles, Cal., correcting ement made by Mr. Gompers in which he quoted, I believe, aker, of Los Angeles. The effect of it is that Mr. Chandler a director of the Los Angeles Shipbuilding and Dry Dock Co. ted. The letter and telegram will be printed in the record. e letter and telegram referred to are here printed in full, as s:)

UNITED STATES SENATE,
COMMITTEE ON IRRIGATION AND RECLAMATION OF ARID LANDS,
February 18, 1918.

UNCAN U. FLETCHER,
Chairman Committee on Commerce,
United States Senate.

SENATOR FLETCHER: I beg to send you herewith a copy of a telegram ed to Mr. Robert B. Armstrong, Washington correspondent of the Los Times, from Mr. Harry Chandler, its publisher, relative to the testi- f Mr. Samuel Gompers before your committee recently. Mr. Chandler is that his telegram be inserted in the proceedings before your committee, ould respectfully request that his desire be complied with.

ours, very truly,

JAMES D. PHELAN.

[Copy.]

LOS ANGELES, CAL.

B. ARMSTRONG,
tional Press Club, Washington, D. C.:

e read statement reported to have been made by Mr. Tom Baker, of Los , to Mr. Sampel Gompers concerning Los Angeles Shipbuilding & Dry o. and its affairs, and introduced in the report of the hearing before the Committee of Commerce. Mr. Baker's statement that I am a director ompany is incorrect. I never had anything to do with the management ffairs. I am turning your message over to Mr. Fred Baker, of the com- ho will undoubtedly wire you as to other statements made by Mr. Baker Gompers.

HARRY CHANDLER.

ereupon, at 5.15 o'clock p. m., the committee proceeded to the eration of executive business, and at 5.30 o'clock p. m. ad- d until 2 o'clock p. m. Friday, February 22, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

FRIDAY, FEBRUARY 22, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m. in committee room, Capitol, Senator Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Sheppard, Shields, Nel-, Johnson, Sherman, and Vardaman.

he CHAIRMAN. We will now hear you, Mr. Manson. Please state r full name and place of residence.

TEMENT OF MR. PHILIP MANSON, MANAGING DIRECTOR PACIFIC & EASTERN STEAMSHIP CO., OF NEW YORK, N. Y.

Ir. MANSON. My name is Philip Manson, and I reside in New k City.

he CHAIRMAN. What is your occupation or business now?

Ir. MANSON. I am in the steamship business. I have been in the mship business for the past 12 years. I organized the Bermuda-antic Steamship Co. in 1908, and was vice president and general nager of that company until the end of 1911. I am now the man-ng director of the Pacific & Eastern Steamship Co., which was or-ized for the purpose of operating a steamship service between United States and China.

enator NELSON. How many ships have you in operation?

Ir. MANSON. We have not yet begun operations; we are awaiting permission of the Shipping Board to enable us to do so.

he CHAIRMAN. What has been your experience generally, Mr. nson, in connection with shipping and with ship construction and yards, if any?

Ir. MANSON. During the 12 years I have been in the steamship iness I have been making a special study of ship values and ship struction, and I am at present interested in a project to establish yards in China. In the course of negotiating for tonnage and purchase of ships, I have made a special study of ship values and e examined a large number of different vessels which have been red for purchase, and believe that I have become quite proficient udging values of shipping.

he CHAIRMAN. Have you had occasion to acquaint yourself with construction; have you examined any yards in this country or in r countries?

Ir. MANSON. I have examined shipyards in a general way, going ugh different yards, and in the course of the repair work that we

have had on our large ship, the *Oceana*, which we operated to Bermuda, I became quite well posted on that branch of the work. The *Oceana* was a 14,000-ton displacement trans-Atlantic liner, which we operated between New York and Bermuda.

The CHAIRMAN. As I recall, Mr. Manson, when the legislation looking to the establishment of a shipping board and the building of a merchant marine in the United States was pending, you were in full sympathy with it and quite helpful in collecting data and material in connection with it. Have you kept up with that legislation and the work of the Shipping Board and the operation of the act, etc.?

Mr. MANSON. Yes, sir. It was my privilege to submit to members of the administration and Members of Congress various data and arguments in favor of the bill.

Senator NELSON. At whose instance did you do that?

Mr. MANSON. Originally at the suggestion of the Southern Commercial Congress, who knew of my knowledge of those matters and asked me to prepare a paper on it, which I did, and which was published as a Senate document.

The CHAIRMAN. Are you acquainted with the facts developed in these hearings as to what is being done by the Shipping Board—the cost of our ships and the program generally?

Mr. MANSON. Yes, sir.

The CHAIRMAN. What do you say regarding the cost of the ships, if you have any views on that subject?

Mr. MANSON. I would say that the whole program, including the cost of the ships, has been very ill advised, and I have prepared a statement covering that rather fully, which, with your permission, I will be glad to proceed with.

The CHAIRMAN. Very well.

Mr. MANSON. I advocate that the Government should abrogate the so-called agency contracts for the construction of the shipyards now building at Hog Island, Newark, and Bristol; also the contracts for the ships to be built in those yards, and the Government to complete the yards and build the ships itself. I also advocate that the Government should immediately investigate contracts in connection with other yards where incompetence and worse can be found and abrogate those contracts and take over the work. I hope to prove to the committee that this would be to the best interest of the Government and the American people, and would greatly aid the successful prosecution of the war.

I have been interested in the Government shipping bill from the very beginning of that legislation. I believe I was the only shipping man who favored it and worked for its passage.

On April 14, 1917, I submitted to Mr. Denman, then chairman of the Shipping Board, and to Gen. Goethals, who was also at that time with the Shipping Board, a brief outline of a plan for the construction by the Government of a large fleet of steel cargo steamers to complement the wooden-ship program which Mr. Denman and Gen. Goethals had just undertaken.

I will read from the communication I sent them:

I suggest that the Government erect a large number of small shipbuilding plants, for which there are hundreds of excellent sites available, and build *steel cargo* steamers of 4,000 to 5,000 tons dead-weight; the plants to be *equipped only* for building hulls and installing the vessels' motive power, the

ter to be purchased from engine and boiler builders throughout the country. lsel and semi-Deisel engines could also be used.

These shipyards, each with at least two building berths, should not cost over 0,000 for each yard. They could be made ready quickly, assuming that the rernment would have first call in obtaining equipment for the yards.

Steel steamers can be built quicker than wooden steamers, and cheaper if present exhorbitant profits on material and construction are reduced, as y would be if this plan is carried out. It should be possible for the Govment to turn out these steamers under present conditions at $75 a ton or less, l if there is no delay in obtaining material it should not take over four nths from laying of keel to trial trip.

steel mill has offered me 300,000 tons of ship plates, delivery to begin within months. Though this was offered me as private business at prices much her than the Government will have to pay, it shows that plenty of plates be had.

he labor problem with steel hull construction will be less difficult than with den hulls. Riveters and skilled iron and steel workers from the building other trades are promptly available for work on steel ships if called to work by the Government; also, an unlimited number of apprentices can be kly trained.

he full cost of the shipyards could be readily absorbed in the cost of the sels built in them during the war. A big start will then have been made ard creating an adequate American merchant marine and maintaining it on ale worthy of the Nation.

Mr. Denman apparently gave no consideration to my plan, as I rd nothing from him. Gen. Goethals wrote me on April 24 the owing letter:

UNITED STATES SHIPPING BOARD,
Washington, D. C., April 24, 1917.

PHILIP MANSON,
290 Broadway, New York, N. Y.

EAR SIR: With reference to the erection of a large number of small shipding plants, to build cargo steamers of 4,000 to 5,000 tons dead-weight acity, this is a matter that interests us very much, but is one that we can take up in detail until we find out what will be the condition of the steel ket. You know it is very hard to get steel supplies at the present time. vever, since we are anxious to get as great tonnage as possible on the water he shortest possible space of time, you may be assured the subject will be open and under consideration.

Yours, very truly,

GEO. W. GOETHALS.

n reply I wrote to Gen. Goethals on April 27 the following:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, April 27, 1917.

. GEO. W. GOETHALS,
United States Shipping Board, Washington, D. C.

EAR SIR: I have your letter of April 24, and I note your comments therein. le it undoubtedly is hard for private concerns not affiliated with steel comes to get steel supplies, it should not be difficult for the Government to get he steel required without delay.

dge Gary is quoted to-day as saying that the present total of the Governt's steel requirements is only between 2 per cent and 3 per cent of mill acity. This leaves a huge margin on which the Government can draw withtaking into consideration increased mill capacity. I am sure that the Govnent can arrange to have all the steel required for shipbuilding purposes as kly as the steel could be used.

Yours, very truly,

PHILIP MANSON.

'o this I received no reply, but it appears that Gen. Goethals n took the matter up with the heads of the big steel corporations, shortly afterwards he made a public speech in which he came out favor of steel ships, and, according to newspaper reports of his

speech, said that his friends, Judge Gary and Mr. Farrell, had assured him that they would supply all the steel necessary for building a large fleet of steel ships. Gen. Goethals's espousal of steel ships did not take place until after he had received my plan which called for the ships to be built in Government yards by the Government. This plan appears to have been squelched, and instead there was evolved a scheme for the construction of so-called Government shipyards to be built by private interests with Government money. I refer to the Hog Island, the Newark, and the Bristol projects. The price which the Government was to pay for the ships to be built in these yards was to be about three times the price at which the ships could be built according to my plan.

Before the contracts for these yards and the ships to be built in them could be signed Gen. Goethals's connection with the Fleet Corporation, which had in the meantime been formed, was severed. Anticipating that the interests that desired these contracts put through would get after the new chairman of the Shipping Board, I called on Mr. Hurley on July 30, a few days after he took office, and cautioned him about those contracts. At the same time I submitted to him my plan for the Government building cargo steamers in Government yards. Mr. Hurley said he knew about those contracts and assured me that they would not be put through.

About six weeks later items began to appear in the newspapers, which I recognized as press-agent propaganda, regarding these so-called Government shipyards and the huge fleets which these yards, with the powerful interests back of them, would rapidly turn out.

On September 15 I wrote Mr. Hurley as follows—I would ask the committee to note how accurately was forecast all the things that subsequently developed in these yards:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, September 15, 1917.

Hon. EDWARD N. HURLEY,
Chairman United States Shipping Board,
Washington, D. C.:

I consider it unnecessary and unwise for the Government to contract with the American International Corporation, which is merely a holding company, or any other private concerns, for its merchant steamers, especially as the Government is practically financing these concerns on this Government work.

This work, involving, as it does, the expenditure of such vast sums of money, which the people must pay by means of heavy and burdensome taxation, should be done by the Government itself in shipyards erected by the Government without the intermediation of such concerns as the American International Corporation.

If this work was done by the Government itself and properly administered for the benefit of the people without regard to the machinations of private interests, the cost to the Government should be no more than half what the present practice of the Emergency Fleet Corporation involves it in.

On April 14 of this year I submitted to the United States Shipping Board and to the Emergency Fleet Corporation a brief outline of a plan for the Government to build a large fleet of merchant steamers in its own shipyards.

Yours, very respectfully,

PHILIP MANSON

On September 17 Mr. Hurley replied as follows:

UNITED STATES SHIPPING BOARD,
Washington, September 17, 1917

Mr. PHILIP MANSON,
290 Broadway, New York City.

DEAR SIR: I have carefully noted what you say in your letter of September 15 with regard to the advantages to obtain by the construction of ships in Govern-

nt shipyards. I am referring your communication to Admiral Capps, of the nergency Fleet Corporation, for his consideration. Thanking you for your terest in our program, I am,

Yours, very truly,

EDWARD N. HURLEY, *Chairman.*

On September 27 Admiral Capps wrote me as follows:

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, September 27, 1917.

. PHILIP MANSON,
290 Broadway, New York City.

IR. PHILIP MANSON SUGGESTS CONSTRUCTION OF MERCHANT VESSELS IN SHIPYARDS ERECTED BY THE GOVERNMENT.

EAR SIR: Your letter of September 15, 1917, addressed to the Hon. Edward Hurley, chairman United States Shipping Board, has been referred to me consideration and reply.

he files of the corporation have been carefully searched and your letter of il 14, in which you state that you submitted a brief outline of a plan for the ernment to build a large fleet of merchant steamers, is not to be found. I therefore unable to make specific reply to your letter.

lowever, let me say that it is obviously desirable that the building resources ll the private concerns in the United States should be utilized to their fullest nt in the present emergency in turning out tonnage of a character suitable our present needs.

Yours, very truly,

W. L. CAPPS, *General Manager.*

On October 1 I replied to this letter as follows:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, N. Y., October 1, 1917.

miral W. L. CAPPS,
General Manager United States Shipping Board,
Emergency Fleet Corporation, Washington, D. C.

EAR SIR: Your letter of September 27 to-day received.

inclose copy of my letter of April 14, also copies of other correspondence ing on the matter.

was much surprised to learn that the same interests with whom Gen. thals had been dealing had, after all, succeeded in getting their contracts ugh and that apparently no ships would be built by the Government except ugh the intermediation of private interests at an increase in cost to the ernment amounting to many millions of dollars, probably hundreds of ions of dollars.

fully agree with you that it is desirable that the building resources of all private concerns in the United States should be utilized to their fullest nt in the present emergency in turning out tonnage of a character suitable our present needs, and there is nothing inconsistent with such a policy in suggestion for a large number of Government owned and operated ship-ls. The fact is, however, that you have contracted for the most of this age with concerns that have little or no existing facilities for this work in many instances with concerns that have never built a ship before; and Government is financing these concerns.

unicipalities would vie with each other in providing the Government, er gratis or at a nominal cost or rental, sites for shipyards. The work now g done by the Government in supervising the work being done for it in ately owned shipyards would go a long way toward the full and complete ation of these yards if there were no private interests to watch, check up, to say nothing of practically eliminating labor troubles.

Yours, very truly,

PHILIP MANSON.

No reply having been received to that letter by October 29, I wrote to Admiral Capps on that date, as follows:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, October 29, 1917.

Admiral W. L. CAPPS,
General Manager United States Shipping Board
Emergency Fleet Corporation, Washington, D. C.

DEAR SIR: I have not yet received your reply or acknowledgment to my letter of October 1. I trust that you duly received my letter.

In confirmation of the statement which I have repeatedly made to the Shipping Board and the Emergency Fleet Corporation that the Government could turn out merchant vessels under present conditions at $75 per ton or less, I refer you to to-day's issue of the New York Journal of Commerce, page 20, under heading "Shipping Notes," from which I quote:

"'Fairplay,' London, is authority for the statement that the price of the American Government's fabricated steel standard ships of 9,000 tons each works out at $145 per ton dead-weight as against $75 per ton for similar vessels being built by the British Government."

As you undoubtedly know, "Fairplay" is the most reliable shipping publication in the world.

I trust that there is some way whereby the Government may save itself from the shipbuilding contracts into which the Emergency Fleet Corporation has involved it and which needlessly add hundreds of millions of dollars to the burdens of the people and benefit only a handful of contractors and the financial gentlemen associated with them.

Yours, very truly,

PHILIP MANSON.

The CHAIRMAN. Mr. Manson, right at that point with the price of steel fixed at $65 a ton, do you think that ships could have been built for anything approaching $75 a ton?

Mr. MANSON. Yes, sir; eliminating, of course, the shipbuilders' profits, and I think subsequently I, to a degree, proved that.

The CHAIRMAN. Very well, then.

Mr. MANSON. Admiral Capps replied to this letter on November 5, as follows:

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, November 5, 1917.

Mr. PHILIP MANSON,
290 Broadway, New York City.

COMMENTS ON HIGH PRICE PAID BY EMERGENCY FLEET CORPORATION FOR SHIPS.

DEAR SIR: I have noted with interest your letter of October 1 (with inclosures) and your letter of October 29, in both of which you suggest the advisability of building vessels in Government yards instead of contracting for vessels under an agency contract.

As you are aware, the great problem of the Shipping Board and the Fleet Corporation is now, and has been, to obtain the greatest number of ships in the shortest time. To the method how best to accomplish this object the board and the corporation gave much study and consideration. The policy adopted by the corporation is the result, and in the opinion of the corporation will best accomplish the object.

Consideration was given to the advisability of establishing Government yards, as you suggest, but it was deemed more advisable and more expeditious, to employ organizations as agents of the corporation. In addition, as you doubtless are aware, the corporation is utilizing existing shipbuilding facilities to the uttermost.

With the present prices of steel ($65 for plates and $60 for shapes) as fixed by the President, and the present rates of labor, it is not clear how the prices at present paid for ships can greatly be reduced.

The corporation would be pleased to receive authentic data, with particulars, regarding vessels building in the United Kingdom at $75 per ton dead-weight capacity, and detailed statement as to how such vessels can be built in the United States for $75 per ton or less, as you state in your letter of October 29.

Yours, very truly,

W. L. CAPPS, *General Manager.*

On November 8 I replied to this letter as follows:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, November 8, 1917.

Admiral W. L. CAPPS,
General Manager United States Shipping Board
Emergency Fleet Corporation,
Washington, D. C.

DEAR SIR: Your letter of November 5 received. I reply as follows:

The results thus far do not bear out your claim that contracting for vessels through agents instead of the Government building them itself will give us the greatest number of ships in the shortest time. On the contrary the reverse is true, as I will show.

My criticism of the action of the Shipping Board and the Fleet Corporation is that by its action in contracting with private interests for the construction of shipyards and ships it has (1) contracted to pay an extortionate price imposing on the people a needless burden of hundreds of millions of dollars excess cost for these shipyards and ships; and (2) the ships will be built less expeditiously and less satisfactorily than if the Government did the work itself.

It goes without saying that the Government, with unlimited funds and infinite resources at its disposal and with practically unlimited power, can handle this construction work far better and more expeditiously than any private organization. It is for these reasons that the whole tendency during the war has been for the Government to take over private enterprises.

If the Government did the shipbuilding work itself there would be little likelihood of labor strikes, and if strikes did occur they could be easily handled if the men were working directly for the Government. Appeals to the patriotism of the men would not be answered by the men demanding "their share of the swag."

As I have stated in my letter of October 1, I make no criticism of your utilizing existing shipbuilding facilities to the uttermost, but the fact is that the corporation has contracted for comparatively little tonnage with existing shipyards, because these yards are filled with other work. The corporation's contracts have been mostly with concerns that have or had little or no existing facilities for shipbuilding, and such shipbuilding facilities as they may create as a result of their contracts with the corporation could be created by the Government itself far more expeditiously and satisfactorily, to say nothing of the great saving in cost to the Government.

You ask me for authentic data, with particulars, regarding vessels building in the United Kingdom at $75 per ton dead weight. If you will inquire of the Bureau of Foreign and Domestic Commerce, Department of Commerce, I am sure they will be able to obtain for you the data and particulars you ask for. "Fairplay," which is authority for the statement I quoted in my letter of October 29, is the most reliable and authoritative shipping publication in the world.

You ask me for a detailed statement as to how vessels can be built in the United States for $75 per ton dead weight or less. Previous to the outbreak of the European war American shipyards would gladly contract to build cargo steamers, one at a time, for $45 a ton dead weight. At this price the shipyards figured at least $15 a ton as their profit; therefore, the net cost before the war of building cargo steamers in American shipyards, one at a time, with the greatly increased cost for plans, patterns, and overhead that this entailed, was not over $30 a ton dead weight.

Assuming that the average of the combined cost of labor and materials has since doubled (and it has not) and making no allowance for greatly decreased cost because of standardized construction, the net cost of ships now should not exceed $60 a ton dead weight. In proof of the correctness of this statement I cite the fact that in 1915, after the war had been in progress for more than a year, I was offered by the Union Iron Works, of San Francisco, a 9,000 ton steamer, Isherwood construction and turbine engines, delivery the early part of

1916, for $625,000. This vessel was being built by the Union Iron Works on speculation for its own account.

San Francisco is the costliest labor market in the United States, and practically all of the materials for this vessel had to be transported across the continent, adding, of course, greatly to its cost. Yet the price asked for this vessel after the war had had its effect on the cost of labor and materials and which undoubtedly included a builder's profit of at least $20 a ton was less than $70 a ton dead weight.

When I conferred with Chairman Hurley regarding the Government building its own ships in its own shipyards, I cautioned him against the efforts that were being made to put through these so-called Government shipyard and shipbuilding contracts, and he assured me that the contracts would not be put through.

I am amazed that with all the opportunities the Shipping Board and the Fleet Corporation had at their disposal to ascertain the facts regarding this shipbuilding work they have consummated contracts compared with which all other war profiteering pales into insignificance, and the most serious result of the corporation's inexplicable failure to have this shipbuilding work done by the Government itself is that the success of our arms may be seriously impaired by the delay in turning out the ships.

Yours, very truly,

PHILIP MANSON.

On November 12 Admiral Capps replied to that letter as follows:

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington November 12, 1917.

Mr. PHILIP MANSON,
290 Broadway, New York City.

COMMENTS ON HIGH PRICE PAID BY EMERGENCY FLEET CORPORATION FOR SHIPS.

DEAR SIR: I have received your letter of the 8th instant and have noted its contents with much interest.

I find nothing in it that convinces me of the practicability at the present time of constructing cargo vessels for $75 per dead-weight ton.

If you feel that ships can be built at or near that price, and can interest any organization in so doing, the corporation will be only too glad to enter into contract with you and will back your undertaking to the limit of its ability.

Yours, very truly,

W. L. CAPPS,
General Manager.

I replied on November 14, as follows:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, N. Y., November 14, 1917.

Admiral W. L. CAPPS,
General Manager United States Shipping Board
Emergency Fleet Corporation, Washington, D. C.

DEAR SIR: Your letter of November 12 received.

Notwithstanding that my communications on the subject have been very clear, you ignore the whole point of my contention, which is, that the *Government* can build cargo steamers for $75 or less per dead-weight ton.

You say that if I can interest any organization to build ships at $75 per ton, the corporation will enter into contract with me. I am not seeking shipbuilding contracts; and I did not say, as your proposal suggests, that private concerns would take contracts at $75 per ton. Why should they when they can so easily get double that price?

I am willing to undertake for the Government the building of cargo steamers by the Government direct, in shipyards to be erected by the Government, at a cost not to exceed $75 per dead-weight ton, this cost to include interest and depreciation on the shipbuilding plant.

Though it will be a considerable sacrifice for me to disassociate myself from the companies with which I am now connected, and though I am not a man of affluence, I will give my services to the Government gratis in order that there may be no suggestion that my proposal is prompted by motives of personal gain.

Yours, very truly,

PHILIP MANSON.

Admiral Capps replied on November 22 as follows:

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, November 22, 1917.

r. PHILIP MANSON,
290 Broadway, New York City.

DEAR SIR: Your letter of the 14th instant has been noted.

You reiterate your statement that ships can at present be built for $75 per ead-weight ton, but you do not now, nor have you in past communications, subantiated that statement.

Your offer to undertake, at a considerable sacrifice to yourself, to build for ie Government, in shipyards to be erected by the Government, cargo steamers ; a cost not to exceed $75 per dead-weight ton is with much interest also ›ted. The cost ($75 per dead-weight ton) is to include interest and depreciaon on the shipbuilding plant.

For the corporation's consideration, and in order that it may have a solid ıais on which to act, will you not lay before the corporation a comprehensive .an covering this undertaking? This plan should include full details of the roposed plants, with detailed estimates of cost of plant and ships, and should ɜ in such form as to permit analysis by the corporation. So far as practicable ıe estimates should be substantiated by actual costs at plants already in opration.

Very truly, yours,

W. L. CAPPS, *General Manager.*

I replied on November 26, as follows:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, N. Y., November 26, 1917.

ıdmiral W. L. CAPPS,
General Manager United States Shipping Board
Emergency Fleet Corporation,
Washington, D. C.

DEAR SIR: Your letter of November 22 received. You ask me to lay before he corporation "a comprehensive plan which should include full details of the roposed plants and detailed estimates of the cost of the plants and ships and o be in such form as to permit analysis by the corporation, the estimates, so ar as practicable, to be substantiated by actual costs at plants already in peration."

If the corporation will pay the cost of employing a naval architect and engieer. I will furnish the comprehensive plans and detailed estimates which you sk for; and if the corporation will give me the necessary authority to examine nd analyze the cost records of plants already in operation, I will substantiate ıy figures by these records.

Although I have given much of my time, services, and money in assisting and dvising members of the administration regarding the shipping legislation durıg the two years it was fighting its way through Congress against all the siniser forces that were arrayed against it, and by virtue of which legislation the hipping Board and the Fleet Corporation became existent, and though I am illing to continue to give all of my time and services to this work, as stated ı my previous letter to you, I should not be called upon to personally incur ıe heavy expense that would be involved in employing a naval architect and ngineer to prepare the comprehensive plans and detailed estimates which you ow ask for.

You say that I have not substantiated my statement that standardized ships ı large quantities can at present be built in Government yards, without profit › intermediaries, agents, or whatever you may call them, for $75 per deadeight ton.

If the fact that Great Britain, with much less favorable conditions for maerials and labor, is at present building cargo steamers for $75 per deadeight ton is not sufficient substantiation of my statements; if the fact that efore the war cargo steamers were built singly in American yards at a net cost › the yards of about $30 per dead-weight ton; and the further fact that the ombined cost of labor and materials has not doubled since then is not suffilent substantiation of my statement, I doubt if it is possible to satisfy you on ıe matter except possibly by actually building the ships in Government yards

at the cost I have stated; and that you are unwilling to put to a test, though you have not hesitated to enter into contracts for shipbuilding at prices which everyone in the shipbuilding business knows, but may not admit outside of their own intimate circles, to be extortionately excessive.

* * * * * * *

My attention was recently called to a pamphlet issued by the Texas Steel Co., which contains a statement by Col. L. P. Featherstone, president of that company, in which he shows with much detail that "more than a reasonable profit can be secured in building standardized merchant marine ships for $100 per dead-weight ton." You are doubtless familiar with this pamphlet and its contents.

I also refer you to the speech of Hon. Rufus Hardy, member of the Committee on the Merchant Marine and Fisheries and chairman of the Committee on Expenditures in the Navy Department, in the House of Representatives, July 14, 1917, from which I quote:

"Prior to August, 1914, ships were generally built, so the testimony showed before our Committee on Merchant Marine and Fisheries, in England at about $40 per ton and in this country at from $40 to $60 per ton; and the shipbuilders here professed that if they had a large quantity of ships to build they could do it at least, if the ships were standardized, as cheaply as England could. Now, they are given a quantity of building, and that in the main to be standardized far greater than ever England's shipyards built; and yet contracts to-day are being made with them to pay a price four times the English ante bellum price and three times the American ante bellum price."

Do you, in the face of the facts and statements cited in this letter, still maintain that I have not substantiated my statement that standardized ships in quantities can at present be built in Government shipyards, eliminating private builders' profits, for $75 per dead-weight ton? If you do, and will arrange for the corporation to pay the cost of a naval architect and engineer, I will prove my contention, so far as is possible to do so, by plans and estimates.

Yours, very truly,

PHILIP MANSON.

On November 28, 1917, Admiral Capps replied to this letter, as follows:

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, November 28, 1917.

Mr. PHILIP MANSON,
New York City.

DEAR SIR: Your letter of the 26th instant has been received. I note that you still do not substantiate your statements that cargo vessels can be built in the United States at the present time for $75 per ton.

Although you again state that cargo vessels are now building in Great Britain for $75 per ton, the corporation has recently received official information to the effect that the present price being paid in Great Britain is $110 per dead-weight ton for cargo vessels and $130 per dead-weight ton for tankers.

Very truly, yours,

W. L. CAPPS, *General Manager.*

On December 3 I replied to that letter as follows:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, N. Y., December 3, 1917.

Admiral W. L. CAPPS,
General Manager United States Shipping Board,
Emergency Fleet Corporation, Washington, D. C.

DEAR SIR: Your letter of November 28 received. I note that you still maintain that I have not substantiated my statement that cargo steamers can be built in the United States at the present time (in Government yards, which you omit to state) at $75 per dead-weight ton.

I can quite understand your persistence in maintaining this attitude, otherwise it would be difficult to justify the Fleet Corporation's contracts.

I am willing to let the facts as stated in my correspondence with you decide whether or not I have substantiated my statement. In fact, your own letter of November 28 goes far toward substantiating my statement. You admit, to

ote from your letter, "that the present price being paid in Great Britain r cargo vessels is $110 per dead-weight ton." This price, of course, has refer-ce to private builders.

I wonder why you cite this as a refutation to my statement, made on the thority of that most responsible shipping publication, "Fairplay," that the ice of cargo steamers built by the British Government is $75 per dead-weight n.

This is another instance of your continued persistence in ignoring the fact at my contention is based solely and absolutely on the shipbuilding being ne by the Government in Government yards.

If private builders in Great Britain will build cargo steamers for $110 per ad-weight ton, which price, of course, includes a profit to them, and with eel at a higher cost to them in Great Britain than in the United States, it is lf-evident that in the large quantities that the standardized ships are being ilt here, if built in Government yards by the Government, with restricted ices for steel, the ships can be built here at much less than $110 per dead-ight ton, the only question being how much less; I say they can be built at 5 or even less per dead-weight ton, and I have submitted sufficient proof of s to satisfy any open-mined person.

Regardless of the foregoing, I ask you, If "the present price being paid for go steamers in Great Britain is $110 per dead-weight ton," why has the et Corporation contracted to pay $150 and higher per dead-weight ton for ilar vessels, and this with concerns that are being entirely financed by the et Corporation, and which do not assume any financial risk or burden in nection with these contracts?

The excess cost to the Government, totaling hundreds of millions of dollars, reason of the Fleet Corporation's failure to have the ships built by the vernment itself in Government yards is secondary to the great injury done the country and to our allies because of the delay in getting out this ton-ge, which delay would have been obviated if the Government with its un-ited powers was itself doing this shipbuilding work in its own yards.

My plan called for the establishment of a large number of comparatively all shipyards throughout the country, which would have been far more ultful and far less difficult to operate than a few huge yards, with their blem of obtaining labor in large volume from a single community and ising this labor after obtaining it. In Government-operated yards the blem of obtaining labor could be made no more difficult than obtaining n for the Army and the Navy.

Private greed and the relentless opposition and fear of certain private inter-s to permit the Government to do this or any other work that would inter-e with their interests is responsible for the huge financial burden that s unnecessarily been placed on the country, and the delay in turning out the ps, and all the far-reaching and serious consequences that have resulted l will result therefrom; all of which is due to a lack of courage and spicacity on the part of the Shipping Board and the Fleet Corporation in ling with these interests.

Yours, very truly, PHILIP MANSON.

It appears that Admiral Capps's connection with the Shipping ard terminated shortly after that letter was sent him. On Decem-15, I received a reply from Mr. G. S. Radford, manager, contract ision of the Shipping Board Emergency Fleet Corporation, which ill read to you:

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, December 15, 1917.

PHILIP MANSON,
290 Broadway, New York City

EAR SIR: Your letter of the 3d instant, addressed to the former general iager, has been referred to this office for reply.

our statements relative to building in a large number of small Government ds have been noted. It is my understanding that the practical objection uch a plan has been the very serious burden it would impose on a central-l organization to obtain a sufficient staff of men qualified to handle such erprises and to do this in the very limited time available.

In so far as the question of cost under existing contracts is concerned, your attention is invited to the fact that it would appear that the excess profits and war taxes generally will take away at least two-thirds of any profits under these contracts.

I trust that the above answers your letter.

Very truly, yours,

G. S. RADFORD,
Manager, Contract Division.

Before reading to you my answer to Mr. Radford's letter, permit me to call your attention to the fact that another official of the Fleet Corporation recently appeared before this committee and made a plea that the steel-ship builders be exempted from the excess profits and war taxes, and Mr. Radford cites these taxes as an offset to the shipbuilders' high profits.

On December 19 I replied to Mr. Radford, as follows:

OFFICE OF PHILIP MANSON,
290 Broadway, New York, N. Y., December 19, 1917.

Mr. G. S. RADFORD,
Manager, Contract Division, United States Shipping Board Emergency Fleet Corporation, Washington, D. C.

DEAR SIR: Your letter dated December 15 to-day received.

You say that the practical objection to building merchantmen in numerous Government shipyards is the burden it would impose on a centralized organization to obtain a sufficient staff of men qualified to handle such enterprises in the limited time available.

I maintain that it would be very much easier for a centralized Government organization to obtain a sufficient staff of qualified men for this work than it has been for the private concerns with which the Emergency Fleet Corporation has made contracts. In fact, the work now being done by the Government in supervising and checking up the work of the private contractors through whom the Fleet Corporation is building its ships would go far toward the full and complete operation of the private yards in which the ships are being built.

I have covered this point very fully in my letters to the former general manager of the Fleet Corporation, and I suggest that you get the file of this correspondence and carefully read it.

As to your endeavor to justify the high prices at which the Fleet Corporation has contracted for ships by saying that two-thirds of the profits under these contracts will be taken away by excess-profits and war taxes, this is the most amazing statement yet made in the series of weak and evasive replies to my several communications on the subject. It is only necessary to state your argument to expose its inadequacy as a defense to the excessive prices at which the Fleet Corporation contracted for its tonnage.

Senator NELSON. In other words—you did not put this in it—the Government in that case would simply be advancing them money to pay these taxes with, would it not?

Mr. MANSON. It might work out that way, except——

Senator NELSON. The Government in that case would simply be advancing them money to pay these taxes and excess profits?

Mr. MANSON. Except that I think that the gentlemen while they had control of the money would in some way, by bookkeeping, etc., manage to reduce the volume of excess profits that would go back to the Government.

To conclude my letter:

Your letter does not answer mine. I am seeking no written answer to my letters. The only worth-while answer you can make is to put in effect my suggestion that the Fleet Corporation arrange for the building of its vessels in Government yards without the intermediation of private agencies, thereby doing away with (1) delays due to labor troubles; (2) delays due to labor shortage; (3) difficulty of housing labor; (4) unnecessary excessive costs to the Government; and the serious consequences that have resulted and will result from these delays, and the burden of taxation resulting from the excessive costs to the Government.

It is very strange that my suggestion, which has had the approval of practical shipbuilders and engineers, and which has withstood every counterargument of the officials of the Shipping Board and the Fleet Corporation, should not have been put to a test when such a test could have resulted in no possible harm (except to those who are profiting hugely from Government shipbuilding contracts), and might have resulted in incalculable benefit to the country and to the allied cause and have done away with most if not all of the present criticism against the Shipping Board and the Fleet Corporation.

Yours, very truly,

PHILIP MANSON.

I would just make a few more observations, based on the testimony that has been given here before this committee. Admiral Bowles testified that much depends on honesty in construction. This goes without saying, but if the Government was doing its own work there would be no question of the Government doing dishonest work for itself.

If the Government was itself doing this shipbuilding work there would not be the present duplication of highly trained experts, one set working for the private builders and another acting as inspectors for the Government.

If the Government was itself doing this shipbuilding work in its own yards it could do away with the evil caused by shipworkers changing from yard to yard, or being weaned from one yard by another yard. The testimony shows that the shipbuilding work has been greatly retarded because of these practices.

If the shipbuilding work was being done in numerous small yards properly distributed it would have obviated the housing question and the bad distribution of labor.

Senator NELSON. And if we had these small yards you contemplated we might have avoided the necessity of providing housing?

Mr. MANSON. Absolutely, Senator.

The CHAIRMAN. Mr. Radford makes the point that it would be necessary to have some organization for the Government to go into it, and that the time it would take to work up that organization would delay the construction by the Government. What do you think about that?

Mr. MANSON. I believe there is no merit in that argument. The Government could have commanded the services of these very men or better men than these private organizations have commanded, and who would gladly have given their services without any question of huge pay. I know personally numerous men, highly qualified ship consulting engineers, architects, etc., who would have been glad to do so, and there is now in the service of the Government a large staff of these men. My plan was to establish small yards and put one of these qualified engineers or naval architects in charge of each yard, which he could administer and engage his own assistants. These yards would probably not employ over 800 or 1,000 men.

Senator NELSON. What would be the capacity of such a yard?

Mr. MANSON. About two ships.

Senator NELSON. That is, two ways?

Mr. MANSON. That is, two ways at a time. And where the facilities were particularly favorable in the matter of obtaining labor, maybe four ways, and, in certain cases, six ways.

I know that a ship, efficiently handled, can be built and launched complete, in four or five months, and that does not provide for working 24 hours a day; it might provide working two shifts.

I went to China in 1915, and passing through San Francisco I called at the Union Iron works. They had absolutely nothing under construction at a certain place in their works. I returned from China four months later, and where there was nothing four months previously they had a ship almost ready for launching.

Senator NELSON. Where was that?

Mr. MANSON. At San Francisco—a 9,000-ton ship.

Senator NELSON. Are you familiar with the Hog Island contract?

Mr. MANSON. I have read the contract as it appeared in the record.

Senator NELSON. And you know in a general way the conditions and terms of it?

Mr. MANSON. Yes, sir.

Senator NELSON. Suppose you were in charge of that yard; suppose the Government had furnished that yard to you as it is to furnish it to this International Shipbuilding Corporation. What could you have built with the Government paying all the money, getting the materials, and paying all the help—what could you have built the ships for?

Mr. MANSON. I have maintained that the ships could have been built at not to exceed $75 per dead-weight ton.

Senator NELSON. At the present price of steel?

Mr. MANSON. Yes, sir.

Senator NELSON. And at the present wages?

Mr. MANSON. And at the wages that existed at that time. I do not know just what change has been made since that contract was let, in wages, but I do not think that the change in that regard would have very greatly increased over the margin which I have allowed myself, because I maintain they can be built at less than $75 per ton; and, furthermore, I would not have undertaken an enterprise of the scope and magnitude they did. I think that by the very size of what they have attempted they have made it utterly inefficient and difficult to handle.

Senator NELSON. Do you not think that because of the immensity of the plant, the greatness of this, that progress has been retarded and delayed?

Mr. MANSON. That is precisely what I mean to say. And then the query might occur, Why did these expert gentlemen do a thing which should have been so perfectly obvious to them? My opinion is that they were out for a contract as big as it could be made, regardless of results. Their object was to make the highest contract it was possible for them to put through.

Senator NELSON. Your theory, then, is that the small ship plant of four to six shipways would have enabled them to get ready and in operation much faster than they have succeeded in these big ways?

Mr. MANSON. It would have been only a matter of days. A shipyard, after all, is a very simple undertaking if it is small enough. You lay your ways and you build on the outside, and you have your necessary shops which can be put up very quickly, especially if they are built of a temporary nature to begin with, sheds, etc., based on the fabricated ship.

Senator NELSON. What is your idea of a fabricated ship as compared with a ship constructed by the old method?

Mr. MANSON. There is no question that the old style, made to order, is a better ship. But there is also, in my mind, no doubt that

the fabricated ship can be made a very serviceable vessel and would compensate for any difference in merit by being built quicker and cheaper. How quick you could build the old-type ship, with all its made-to-order features, is shown by the records in the shipyards. As I have stated, the Union Iron Works turned out steamers in a very few months by the old system of shipbuilding.

Senator NELSON. The Emergency Fleet Corporation has been in existence almost a year, not quite.

Mr. MANSON. I think it was organized some time in April.

Senator NELSON. In April of last year?

Mr. MANSON. Yes, sir.

Senator NELSON. And these big agency contracts, as we call them, with the submarine company, the International Corporation and the Merchants at Bristol, were all made last September?

Mr. MANSON. Well, they were signed last September.

Senator NELSON. That is what I mean, they were completed?

Mr. MANSON. Yes, sir.

Senator NELSON. They were all the time negotiating then from April until September before they made any of those contracts?

Mr. MANSON. Yes, sir.

Senator NELSON. Was not that unnecessary delay?

Mr. MANSON. The delay, as we know, was due to the fact that Chairman Denman refused to approve the contracts that Gen. Goethals was endeavoring to put through. And, then, there appears to have been a delay of two months after the contracts were turned over to Admiral Capps. I criticize the making of the contracts at all, but if they were turning out the work expeditiously, then, we might criticize the fact that they were held up and were not enabled to begin work sooner.

Senator NELSON. Have you been down to Hog Island at any time to see how they have been operating?

Mr. MANSON. No. I only know from what I have read in the testimony taken here.

The CHAIRMAN. And you think, Mr. Manson, that it is utterly impossible to manufacture ships rapidly and economically by putting in the enormous number of ways that they are attempting to do at Hog Island?

Mr. MANSON. My answer to that is this: If you create a shipyard and expand it over a period of years, and in that way acquire your efficient organization, then, your very large shipyard is probably to a degree more efficient than a small yard. But it is quite impossible, and results have proved that, I think, to create a huge shipbuilding enterprise like that by a wave of the wand, so to speak, overnight. Therefore, inasmuch as these yards had to be created from nothing, to my mind the only practical and the most efficient way to have done that would have been to have created numerous small units, and then the inefficiency, if there was any, would be small and confined to a particular yard, or a few yards.

The CHAIRMAN. But, even if you had contempleted a big scheme which might eventually work up to 50 ways, you would not undertake to put down all of the 50 ways the first thing, would you?

Mr. MANSON. No, sir.

The CHAIRMAN. You would build to that; you would build four or five or six or a dozen ways and utilize them and then afterwards,

if your organization was in good shape and everything working well, you would go on with more ways until you probably got up to 50, but that would take time, would it not?

Mr. MANSON. Exactly.

Senator NELSON. Have you examined the testimony and have you come to the conclusion how much we are likely to lose on that Hog Island contract?

Mr. MANSON. I am unable to give any testimony on that point at this time.

Senator NELSON. Have you looked at that salary list of overhead employees?

Mr. MANSON. Yes, sir; and I have noted that——

Senator NELSON. I want to call your attention here to the salaries. Here is Goodenough, whose salary is given here as $2,083.33 a month. He appears to have got before working for the Government a salary of $1,500 a month. What have you to say about that salary, if you are familiar with it?

Mr. MANSON. I would say the salary was very excessive. I have also noted that a great many of the heads in that published list are not practical shipbuilders.

Senator NELSON. Here is the dredging engineer—$1,000 a month. He was earning, before he went there, $833.33. What do you say about that?

Mr. MANSON. I would say that that salary was excessive. It may guide you somewhat to get a fair basis of what the salaries should have been on a liberal basis when I tell you that the usual fee in retaining the most competent marine engineers and naval architects, men of the first rank, is $25 a day when transiently employed and a considerably lower basis of pay when employed for a considerable period of time.

Senator NELSON. Transient employment would be $25 a day and permanent employment less than that?

Mr. MANSON. That is, employment covering any substantial period, even if it was not for the year.

Senator NELSON. Here is a consulting engineer. He was making $416.67 a month before. He is getting now $1,125 a month. That means he did not have to stay on the job; he is simply consulted. Do you not think that is exorbitant?

Mr. MANSON. I consider that salary exorbitant, but when you employ a consulting engineer, as it would appear he was employed, they do generally stay on the job, or should stay on the job, during the time they were employed.

Senator NELSON. Do you think it was necessary to employ a consulting engineer before they had got the foundation laid so that they put any ships on the ways, while they were simply erecting the plant, putting in the piles, grading up the yard, and doing all that?

Mr. MANSON. A competent consulting engineer would be capable of acting in connection with the ship-plant work as well as the shipbuilding work.

Senator NELSON. Here is the transportation manager. His salary previously was $550, and now he is getting from the board $1,250 a month. What do you think about that?

Mr. MANSON. I know transportation men, qualified for that position, employed by railroads, who are as efficient as it is possible to be in that work who are getting $175 per month.

Senator NELSON. This is $1,250 a month. Then, if you had small yards it would not be necessary to have publicity agents, would it, to publish the operations of the yard?

Mr. MANSON. It certainly would not, and I consider this whole publicity business as one of the worst evils in connection with the Shipping Board work.

Senator NELSON. Let me call your attention to these figures here: Mr. Hunt, publicity assistant, $666.66 a month, and D. T. Pierce, publicity manager, $833.33, and publicity assistant, $500 a month—another man—three of them.

The CHAIRMAN. That does not include other office force, office rent, and all that sort of thing. Those are just the chiefs.

Senator NELSON. No. There is $2,700—outside of the typewriters and stenographers and office room, and all that—which is paid to those three publicity agents a month. What do you think of that expense? Would you have had that in a yard if you had small yards?

Mr. MANSON. I would not have ever dreamt of having publicity men connected with an enterprise of that sort. I was in the newspaper business previous to my steamship connection, and I know that the newspapers are only too glad to print everything of a legitimate news value, and so the aid of any publicity agents would be unnecessary.

Senator NELSON. Here is another I want to call your attention to: J. D. Andrews, assistant works manager, $1,000 a month. What do you think of that?

Mr. MANSON. I think that is unduly high.

Senator NELSON. There are a good many other bonanzas in this list. Here is the superintendent of ship assembling. There have not been any ships to assemble so far. Assembling means getting the fabricated stuff together. There has not been any assembling yet, still he is there being paid $1,000 a month. What do you think of that?

Mr. MANSON. I consider that unduly high.

Senator NELSON. Then assistant works manager, which I also call your attention to, who receives $1,000 a month, a man by the name of Harris. What do you think of that?

Mr. MANSON. I consider that too high.

Senator NELSON. Here is another position, manufacturing manager ship construction, $1,250 a month. How does that strike you?

Mr. MANSON. As very high.

Senator NELSON. Here is another one which makes me almost blush to think how small it is compared to the others—office manager at Hog Island, $200 a month only.

Mr. MANSON. That might be a reasonable salary.

Senator NELSON. I suppose that is because he was kept too near the "hogs." [Laughter.] Here is the manager of employment, that is, the hiring of the help, at $1,000 a month. What do you think of that?

Mr. MANSON. I can not reconcile that salary with the nature of his work.

Senator NELSON. Here is manager of purchasing, $1,000 a month. What do you think of that? What would a big establishment pay? Would they pay $1,000 a month for a purchasing agent?

Mr. MANSON. A purchasing agent, when very efficient, can earn any salary that he is given, but most of the purchasing for this work appears to have been on Government-fixed prices, and I do not see where great ability would be required.

Senator NELSON. There is no bartering about prices; all he would have to do would be to order.

Mr. MANSON. Order the goods.

Senator NELSON. No negotiation about figures?

Mr. MANSON. No.

Senator VARDAMAN. What was his vocation before that?

The CHAIRMAN. It says 15 years with Stone & Webster, general purchasing agent since 1910; recently in charge of cantonment division.

Senator NELSON. He was getting $816 a month before he came and now $1,000. Here is another jewel: Structural engineer, $1,000 a month. What do you think of that?

Mr. MANSON. I consider that salary too high.

Senator NELSON. And here is manager of hull fabrications. They have not commenced fabricating any hulls here yet, and the fabrication is done outside the yards; it is not supposed to be done in the yard. The fabrication for this shipbuilding plant is assumed to be done elsewhere, is it not?

Mr. MANSON. Yes, sir; most of the fabricating work would be done outside the yards.

Senator NELSON. He gets $1,250 a month, and he got $500 before. Have you studied over this list of wages?

The CHAIRMAN. In that he was formerly employed as sales manager of Minneapolis Steel & Machinery Co.

Senator VARDAMAN. What was he paid there?

Senator NELSON. And what was the name?

The CHAIRMAN. Gillette, manager of hull fabrication, $1,250. He was formerly sales manager.

Senator NELSON. Oh, yes. It says plus interest in business; came at a "distinct sacrifice." You know a good many of these fellows who now get big wages there came at a sacrifice—that is, they claim they did.

Senator VARDAMAN. Does it say "distinct sacrifice"; is that the language there?

Senator NELSON. Yes, sir. This was one of the sacrifices.

Senator VARDAMAN. Do they use the language "distinct sacrifice" there?

Senator NELSON. Yes; sure.

Senator VARDAMAN. The "dis" ought to be scratched off.

Senator NELSON. He was getting $500 before he came as a "distinct sacrifice."

Senator VARDAMAN. It would be well to strike out the "dis," would it not? [Laughter.]

The CHAIRMAN. Here is sales manager of a steel and manufactur-
g concern. Would a sales manager of such a plant have any
culiar qualifications for being a manager of fabrication of ships?
Mr. MANSON. I would not think so. He would probably have
alifications in regard to fabricating steel and he might, working
ntly with the marine engineer, apply the fabricating process to
arine work.
Senator NELSON. I wish you would take this volume 5 of the record
the hearings and go over the list there beginning at page 1446 and
epare us a statement of employees, and specify whom you think
re necessary and who unnecessary and point out where you think
e wages were exorbitant. Take some time to go over it and do it
surely. State whether there are any more men in that force than
necessary under these circumstances, and also indicate in what cases
e wages were excessive.
Mr. MANSON. You ask me to prepare an analysis of this pay roll.
would be quite impossible for me to do that, because I do not know
t what program they had in mind in connection with this list of
n in the pay roll. I could prepare a suggested pay roll to cover a
all yard.
The CHAIRMAN. Such as you would have advised?
Mr. MANSON. Such as I would have recommended. I can go over
s list and make general suggestions as to the excessiveness or
sonableness of the salaries indicated, and I will be very glad to
that.
The CHAIRMAN. Then we will ask you to do that, and send it down
l we will put it in the record as a part of your testimony.
One objection that Admiral Bowles had to the suggestion that
Government might have gone on and built these ships was, as I
all, that it would have taken the Government's force out of the
ce here. For instance, he himself could not have attended to the
rk here and at the same time built ships. What do you say as to
t objection to the Government's taking the work?
Mr. MANSON. I do not think that objection is well taken, because
would not have interfered with the organization required by the
et Corporation here in Washington at all. That would have been
complete as the circumstances required, and we would have had
ilable the men who are now being duplicated at these plants as
pectors, the plants now not only having the Government inspec-
s but similar skilled engineers and superintendents who are work-
directly for the private contractors.
The CHAIRMAN. Do you think you could have gotten a sufficient
ce of experts in each yard to have carried on the shipbuilding
gram to the extent to which the Shipping Board has arranged it
v—that is, built as many ships and as quickly as they propose?
Mr. MANSON. Yes, sir; without difficulty.
The CHAIRMAN. What would you say, Mr. Manson, in your opin-
, with regard to the placing of these Government yards as they
placed now—three Government yards within a radius of 50 miles
each other?
Mr. MANSON. I consider that a mistake. It obviously causes a
gestion on the trunk lines that feed that section and also makes
or conditions very difficult.

The CHAIRMAN. Are you acquainted at all with conditions southern portion of the country, South Atlantic and Gulf, a facilities in that region?

Mr. MANSON. I am somewhat acquainted with conditions Carolinas and Georgia and in the neighborhood of Jacksonvi

The CHAIRMAN. And whether or not the conditions are fa there for building ships?

Mr. MANSON. I consider the conditions there very favora building ships; in fact, I was interested indirectly in som building enterprises in Jacksonville and at Beaufort, S. C., were prompted in going into those enterprises because of t ticularly favorable conditions as to labor and shipbuilding tions.

The CHAIRMAN. Is the climate also favorable for shipbuildi

Mr. MANSON. It was the climate that had a strong influen us, on account of the fact that the work could be carried on year without interruption.

The CHAIRMAN. I believe that is all; and the committee ciates your appearance here.

(Thereupon, at 3.05 p. m., the committee adjourned, subject call of the chairman.)

ED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

FRIDAY, MARCH 1, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

mittee met, pursuant to call, at 2 o'clock p. m., in the com-
m, Capitol, Senator Duncan U. Fletcher, presiding.
: Senators Fletcher (chairman), Ransdell, Sheppard, Bank-
son, Smith. Jones, Sherman, Harding, and Fernald.
· JONES. Mr. Chairman, before the witnesses begin their
s to-day, there are one or two matters that I should like to
e record.
es 572 and 573 of the record, the testimony of Mr. Brown
the price of lumber on the Pacific coast, and he refers there
tract made for lumber at $30 a thousand.
e 574 of the printed record the following occurred:

rx. We placed a direct contract with a lumber company for six
les, at an average price of $30 a thousand.
'ONES. What class of ships were those: were those of the Ferris type,
gh type?
rx. Ferris type ships.
'ONES. You are sure of that?
rx. Yes, sir.

s 1032 of the record occurs a letter from Mr. Brown, giving
s of the shipbuilding companies who got this lumber. I
mined the contracts made with those people, and find that
racts were for ships of the Hough type, and not of the
e, as stated by Mr. Brown. And in this connection I want
n the record a statement found in the Official Bulletin, of
July 2, 1917, giving an announcement of the United States
Board; and I want to say in connection with that, that I
ly informed that at that very time representatives of the
ber interests of our State were here in Washington and
were prepared to furnish lumber to the Government at
ousand, if they had been given an opportunity to bid on it.
rticle from the Official Bulletin referred to is here printed
follows:

[illegible]

[illegible] Shipping Board [illegible]
[illegible] Fleet Corporation has [illegible]
[illegible] of lumber [illegible] May with the Coos Bay

"This contract provided for the sale of 30 units of fir timber for vessels of the *Ferris* type, the lumber to be delivered on the dock at Marshfield, Oreg., for $30 per thousand. There was a 40-mile rail haul behind the final delivery of the lumber.

WANTED TO ASSIST GOVERNMENT.

"The Coos Bay Lumber Co. is controlled by former Congressman William Kent, now tariff commissioner; C. A. Smith, John Lyon, and C. R. Johnson, well-known lumbermen of the Pacific coast; and John Garrigued. They came to Chairman William Denman, of the Shipping Board, and inquired in what way they could assist the Government. They were asked to make a figure on this class of lumber, at what they considered a good profit, disregarding the war-market conditions.

"They offered this figure, which was accepted by Mr. Denman and Gen. Goethals. Afterwards, on learning that the price of lumber was being considered by the Federal Trade Commission, the Coos Bay Lumber Co. offered to sell at $30 a thousand feet or, at the choice of the Emergency Fleet Corporation, at the price fixed by the Federal Trade Commission.

LESS THAN ESTABLISHED PRICE.

"The Shipping Board is glad to make public the attitude of these gentlemen, which, while it typified the action of many producers dealing with the Government, is a happy example which we hope others may learn to follow."

The price is considerably under that established by the lumber committee of the Council of National Defense, which was $35 a thousand feet, plus freight to tidewater.

Senator JONES (continuing). With reference to Mr. Cotton's testimony, regarding his compensation from the Government, I have here a letter from the secretary of the Federal Reserve Board, which I want to insert in the record; also a letter from the Hon. Franklin K. Lane, Secretary of the Interior, addressed to me under date of February 11, 1918; also a letter from Edward N. Hurley, chairman United States Shipping Board, addressed to me, dated February 8, 1918, which I should like to have inserted in the record at this point.

(The letters referred to are here printed in full, as follows:)

FEDERAL RESERVE BOARD,
Washington, February 6, 1918.

Hon. WESLEY L. JONES,
United States Senate.

DEAR SIR: In answer to your letter of February 5 in which you inquire about payments made to Mr. Joseph P. Cotton by the Federal Reserve Board, I have to advise you that Mr. Cotton was appointed consulting counsel to the board on May 5, 1915, at a salary of $5,000 per annum. On July 1, 1917, his compensation was altered to $2,000 per annum, because of the large reduction in legal work which required the services of consulting counsel. The annual reports of the board for 1915 and 1916 list Mr. Cotton and his salary at $5,000, and the forthcoming report for 1917 will list him at $2,000, the figure given in each case being that which was valid at the close of the year for which the report is rendered.

Yours, very truly, H. P. WILLIS, *Secretary.*

P. S.—Mr. Cotton's salary is paid semimonthly, as is the case with salaries of all members of the staff of the Federal Reserve Board.

THE SECRETARY OF THE INTERIOR,
Washington, February 11, 1918.

MY DEAR SENATOR: In reply to your letter of February 5 relative to the employment of Mr. J. P. Cotton, permit me to advise you that Mr. Cotton has been employed as agent and counsel for the Alaskan Engineering Commission in connection with the purchase by the Government of the Alaskan Northern and the Tanana Valley Railroads in Alaska. I have also referred to Mr. Cotton

om time to time various details connected with the opening of the railroad rminus and other matters of a legal nature pertaining to the construction of e Government railroad in Alaska.

The payments made to Mr. Cotton for his services in the capacity noted ove are as follows:

September 16, 1915, $2,500.

January 12, 1917, $500.

Cordially, yours,

FRANKLIN K. LANE.

Hon. WESLEY L. JONES,
United States Senate, Washington, D. C.

UNITED STATES SHIPPING BOARD,
Washington, February 8, 1918.

Hon. WESLEY L. JONES,
United States Senate, Washington, D. C.

MY DEAR SENATOR: In compliance with your request of February 5, in re-d to employment of Mr. Joseph E. Cotton as counsel for the Emergency Fleet rporation, I beg to advise you that Mr. Cotton's employment began on March 1917, and terminated on August 11. Mr. Cotton was engaged at a salary $1 per year and received no other compensation, reward, or perquisite.

am advised by the disbursing officer of the Fleet Corporation that Mr. Cot- never called for that portion of his salary at $1 per year which would be him for the time he was employed as counsel.

Yours, very truly,

EDWARD N. HURLEY, *Chairman.*

Senator JONES (continuing). With reference to the foreign-built ips in our country that escaped requisition by the Government by ing taken by the foreign owners on certain dates, I have a letter at I think makes that point clear, from Mr. Hurley, chairman of e Shipping Board, addressed to me under date of January 31, 1918, d I ask to have that also inserted in the record.

(The letter referred to is here printed in full, as follows:)

UNITED STATES SHIPPING BOARD,
Washington, January 31, 1918.

n. W. L. JONES,
United States Senate, Washington, D. C.

MY DEAR SENATOR: I am pleased to furnish you, in response to your request the 23d instant addressed to the Secretary of Commerce, and by him referred the Shipping Board, the following list of vessels above 2,500 tons dead-weight structed in American yards and taken possession of by foreign owners be-en the dates specified:

Steamer.	Dead-weight tonnage (approximate).	Taken over by owner.	For registry under flag of—
m June 15, 1917, to July 11, 1917:			
Stolt Nielsen	8,594	June 26	Norway.
Astri	2,583	July 3 (approximate).	Do.
War Tune	3,068	July 7 (approximate).	England.
n July 11, 1917, to Aug. 3, 1917:			
Storviken	7,053	July 19 (approximate).	Norway
Poitiers	3,057	July 20 (approximate).	France.

n response to the last paragraph of your letter, you are advised that, in ad-on to the five vessels named above, the following vessels above 2,500 tons

deadweight under construction in American yards for foreign account on June 15, 1917, were subsequently completed and conveyed to foreign owners on the dates indicated:

Steamer.	Deadweight tonnage.	Reconveyed to former owner.	For registry under flag of—
War Sword	10,000	Aug. 30	England.
War Song	4,200	Oct. 2	Do.
War Viceroy	8,800	Oct. 23	Do.
Limoges	2,930	Sept. 11	France.
Lieut. De Messiessy	8,800	Sept. 26	Do.

The last five vessels mentioned were commandeered under authority of the act of June 15, 1917, and the Executive Order of July 11, 1917. However, inasmuch as all these ships were practically completed when commandeered and the Government had contributed nothing to their completion, and they were all for account of our allies, the board considered it proper to make these reconveyances.

Sincerely, yours,

LESTER SISLER, *Secretary.*

Senator JONES (continuing). I also have a statement from the Secretary of the Treasury in answer to a letter of mine in which I asked him for a statement of the names, tonnage, and flag of vessels constructed in American shipyards which sailed from ports of the United States for the first time after June 15, 1917. This letter gives a long list; and so I do not want to put it all in the record, but I want to say that this letter shows that on July 28, 1917, the *War Monarch*, a ship of 6,104 tons, sailed under the British flag. That vessel is not named in this list given by the Shipping Board.

Also that on June 30, 1917, the *Goiaa*, a ship of 5,671 tons, sailed under the Norwegian flag. Those are the only two ships named in this letter that are not shown on the list of the Shipping Board, except that the ship *Lieutenant De Messiessy*, which is shown in the letter from Mr. Hurley as of 8,800 tons, is given on this list as of 4,405 tons. I assume, however, that this is the same ship.

That is all, Mr. Chairman.

The CHAIRMAN. I wrote a letter to Mr. H. A. Evans, president of the Baltimore Dry Docks & Shipbuilding Co., asking him if it would be convenient for him to appear before the committee as an experienced shipbuilder and give us his views of the general situation and make any suggestions he might have that would speed up or increase the production of ships.

It was not convenient for him to come to Washington, but he has written a letter which gives quite fully his ideas dealing with the subjects, generally, of wages, hours, and conditions of work; housing; transportation; prohibition; repair facilities; and other matters connected with shipbuilding. I think it would be of advantage to have that letter go in the record.

(The letter referred to is here printed in full, as follows:)

THE BALTIMORE DRY DOCKS & SHIP BUILDING CO.,
Baltimore, Md., February 25, 1918.

Hon. DUNCAN U. FLETCHER,
Committee on Commerce,
United States Senate, Washington, D. C.

MY DEAR SENATOR FLETCHER: Referring to your letter of February 6, relative to appearing before your committee, I have been so busy with urgent cur-

reat work, labor adjustment boards, and matters of this kind, that I have not had an opportunity to reply.

There are only two, probably three, important suggestions which I wished to make, and as the most important, i. e., labor, is in way of adjustment, I do not think there is any necessity of my taking up the time of your committee.

WAGES, HOURS, AND CONDITIONS OF WORK.

I have felt that there has been unnecessary delay in fixing wages, hours of work, and conditions of work, on the part of the Government. In the meanwhile, owing to the agitation and unrest of the working force, the efficiency of the yards has materially decreased.

I have felt that it was up to the Government to fix conditions for the men, and, in fact, fix their wages slightly higher than prevailing rates—to make the employers abide by the conditions fixed and use all moral and political pressure to make the employees do the same.

The Adjustment Board has within the last few days given out its findings, and we are now in a fair way to getting these matters adjusted, and when this is done we can build ships.

There is just one suggestion in connection with the report of the Adjustment Board.

Wages have been made higher—I might say very high—and steps should now be taken to prevent employers not engaged in Government work, or employers engaged in Government work of lesser importance than shipbuilding, from meeting the rates fixed by the Adjustment Board for shipbuilding employees.

In other words, I believe that we will all admit that shipbuilding is, without question, the most important industry in the country to-day, and the rates in the shipbuilding industry should be slightly higher than those paid in other industries, in order that the very best men will be attracted to shipbuilding.

HOUSING.

Other important subjects have been spoken of by previous witnesses before your committee, and steps have been taken to solve one problem—i. e., the housing problem.

Houses will have to be provided not only at isolated plants like the Bethlehem Shipbuilding Co.'s at Sparrows Point, but also at plants like ours located in Baltimore.

We are, at the present time, employing about 4,500 men, and when we have our new plant in operation and working shifts, we shall employ between 8,000 and 10,000. The housing problem, therefore, is one which will not be solved unless it is taken up in a wholesale way.

TRANSPORTATION.

Reference has been made before your committee regarding transportation of men to the works.

With the enormous increase in the number of employees, provision is not being made to get the men from their homes to the works.

In Baltimore the transportation system is at present entirely inadequate, and when we double our force we do not know how we are going to handle this question.

I believe that specific authority should be given the President or his authorized representative to commandeer street railway systems and to provide the necessary transportation facilities.

PROHIBITION.

Nothing has been said before your committee regarding prohibition.

I am not a prohibitionist myself, but I feel sure that if we had prohibition in this country during the period of the war, that it would increase the output of the shipyards by at least 10 per cent.

I understand that this is a big subject and must be looked at in a big way. I believe, however, that immediately an order should be issued preventing the sale of any intoxicating liquors within half a mile of any shipyard plant.

REPAIR FACILITIES.

Little has been done toward increasing the repair facilities, while a great deal has been done toward increasing the shipyard facilities.

Immediately steps should be taken to increase repair facilities on the Atlantic coast, and if this is not done, the need will later be severely felt.

I have written Mr. E. F. Carry, director of operations, United States Shipping Board Emergency Fleet Corporation, a letter on this subject, copy of which is inclosed, and which I believe will be of interest to you.

Our contracts for new construction work are as follows: Nine 6,200-ton cargo vessels requisitioned by the Fleet Corporation; eight 8,800-ton cargo vessels; twelve 10,000-ton oil tankers, contract for which has been closed but not yet signed; and six 6,000-ton oil tankers, contract for which will be closed probably within the next few days.

Regarding tonnage which we should have available within the next 6 months, 12 months, and 18 months, I have not had an opportunity to look into this matter sufficiently to give you an estimate of any value.

I strongly believe, however, with every other practical shipbuilder in this country, that it will be absolutely impossible to turn out 6,000,000 tons of oversea ships in the year 1918.

I hardly think that the views which I have expressed above warrant my taking up the time of your committee. If, however, there is any additional information which I can give you, I shall be pleased to do so.

Very truly, yours,

H. A. EVANS, *President.*

The CHAIRMAN (continuing). I have also a communication from Senator Phelan, transmitting a letter from Mr. W. I. Hollingsworth, which deals with certain phases of Mr. Gompers' testimony. Mr. Hollingsworth is from Los Angeles, Cal., and undertakes to make corrections of certain statements made by Mr. Gompers. I think it would be fair to have these letters go in the record.

(The letters referred to are here printed in full as follows:)

UNITED STATES SENATE,
COMMITTEE ON IRRIGATION AND RECLAMATION OF ARID LANDS,
February 28, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman Committee on Commerce, United States Senate.

DEAR SENATOR FLETCHER: I beg to send you herewith a letter just received from Mr. W. I. Hollingsworth, a citizen of repute, president of the W. I. Hollingsworth Company, of Los Angeles, Cal.

Mr. Hollingsworth incloses in his letter a number of statements, which refute the statements made before your committee recently by Mr. Gompers. In the interest of having the record straight, Mr. Hollingsworth asks that his statement and the inclosures be made a part of the hearings before your committee, in which request I beg to respectfully join.

Yours, very truly,

JAMES D. PHELAN.

W. I. HOLLINGSWORTH & CO.,
Los Angeles, Cal., February 21, 1918.

Hon. JAMES D. PHELAN,
Washington, D. C.

DEAR SIR: On the 19th instant Mr. Charles W. Fay wired you the inclosed message, which is self-explanatory.

We wish to make a further statement to you, which possibly you may care to present to Senator Fletcher's committee regarding statements which have been presented to said committee that we had placed certain advertisements in the Los Angeles papers and had in other ways induced employees in the Los Angeles Shipbuilding & Dry Dock Co. to purchase lots in a subdivision which we control near said shipbuilding plant. We desire to state that we have never placed or caused to be placed such advertisements as referred to or any advertisements of a similar character were ever placed by us in any paper.

We also wish to emphatically deny that we have ever sold or offered to sell a job with a lot" to any person whomsover, nor has there been any arrangement, agreement, or understanding between the shipbuilding plant and ourselves or any other industries to the effect that they were to employ people who purchased property from us.

In explanation permit me to say that the subdivision in which we are selling property is located on the electric car line about seven minutes ride from the shipbuilding plant. Said subdivision is known as Harbor Industrial City, is regularly laid-out town, with graded streets, water system, etc. That at the present time there are located in this townsite a church, school, stores, post office electric lights, etc. That there are also located in this subdivision of ours two industries which employ more than 150 workmen, and a third is now under construction.

It has been a well-defined policy of my company to assist in finding employment for people located and interested in my properties. Therefore we have given every assistance possible to people who desire employment, not only with the industries located in our property, but to all industries such as canneries, lumber yards, shipbuilding plants, etc., located in the Harbor district. In not a single instance have we ever sold property with a promise or guarantee that a person purchasing said property would be guaranteed a position in any of the above-mentioned industries, but we have consistently tried to assist all our people to obtain employment. There are approximately 30 people employed in the shipbuilding plant who purchased property from us. In almost every instance we have assisted them in building their houses, so that they might be relieved of the necessity of spending two or three hours daily on the cars going to and from their work.

Some time in December we were informed of a rumor being circulated that we were making inducements to certain purchasers for our property in the way of offering them employment. We at once called upon United States District Attorney Robert O'Connor, of this city, and told him of said rumors. He informed us at that time that he believed said rumors to come from the labor organizations and assured us that he believed we were helping rather than hindering the shipbuilding company in providing houses for their employees.

I wish to further state that I am not, nor never have been, a director in the Los Angeles Shipbuilding & Dry Dock Co.

Inclosed please find copies of a number of statements of employees of the shipbuilding plant and other industries who have purchased property and are living on our tract.

I will deem it a great kindness if you will give this matter a little attention, and if you have any suggestions to make in regard to the matter, would be very pleased to receive them.

Thanking you in advance for any courtesies which you may show us in having this matter properly presented to Senator Fletcher's committee, I am,

Very truly, yours.

W. I. HOLLINGSWORTH.

MR. WILSON'S STATEMENT.

I came to Harbor City about nine weeks ago, and am working at the Crown Sash Door & Mill Co. here at Harbor City at the present time. I did not buy my lot here. My wife and I started a drug store, and W. I. Hollingsworth & Co. helped me get the fixtures and get started. They helped me not only in regards to getting a position, but in many other ways, such as putting in the fixtures in the building and fitting up the living rooms with necessary partitions, etc. The company have assisted other people in similar ways as they did for me. I have never heard of them making any guarantees. To my knowledge they have assisted their people in many different ways, but I have never heard of their guaranteeing a position as an inducement to buy a lot. I have never heard of any salesman of the W. I. Hollingsworth & Co. in soliciting people to purchase property at Harbor City, state to such persons that they would guarantee to secure them a position in the shipbuilding company if they purchased property at Harbor City. I stated to W. I. Hollingsworth & Co. that I would like to obtain employment if I located at Harbor City. The company stated to me that they would do their best to assist me in finding employment. They never at any time, nor had any agent of theirs, ever suggested that I

should purchase property before they would render any assistance to me in securing work; on the contrary, they have assisted me in obtaining a position at Harbor City in the Crown Sash Door & Mill Co.

Dated January 31, 1918.

HENRY L. WILSON.

STATEMENT OF MR. CHARLES STEWART.

I do not own any property in Harbor City. I came down to San Pedro from San Luis Obispo and wanted to get a place to stay, because I felt there would be no trouble getting work there. I could not find a house in San Pedro or Wilmington to rent, and finally heard there were houses to rent in Harbor City, and came down here. Mr. Preston rented me a house in Harbor City but did not guarantee me a job or make any promises whatever in that regard. After that he took me to the shipbuilding plant with several other men, and the only work they had was bolting up. They took me and another man, but did not put any of the others on. I did not pay Mr. Preston anything for helping me get the work, nor did I buy any property from him. He said if I ever wanted to buy a lot he would sell it to me. He also said that if anyone at Harbor City wanted work he would be glad to try to help them whether they bought property or not. I expected to work at the Union Oil Co., but they are not ready yet. I was told that there was lots of work at San Pedro, and that was how I happened to go over there to look around.

I belonged to the Oil and Gas Well Worker's Union, but am doing different kind of work at the plant now. I took the job bolting up because I wanted work, and there was no other kind of a job open for me at that time.

CHARLES STEWART.

Dated January 31, 1918.

STATEMENT OF MR. A. E. KLINE.

In reference to my buying a lot at Harbor City, will say that no one promised or guaranteed me work. I came here on December 14, 1917, and bought a lot because I liked the property. Mr. Drinkwater sold me the lot and said there was plenty of work in this locality and that I could probably get work at the shipyards or on the tract. I said I wanted to work on the tract. I went home after that and came back a few days later and have been working on the tract almost every day since, part of the time I have been working for Mr. Little on some houses he is building. I never heard the salesmen or the W. I. Hollingsworth & Co. in talking with prospective purchasers, nor did they when talking to me concerning the purchase of property here promise or guarantee a position to any purchaser of property in Harbor City and in any of the shipyards at San Pedro, if they would buy property at Harbor City.

A. E. CLINE.

Dated January 31, 1918.

STATEMENT OF MR. GRILL.

I went to San Pedro to look for a room, for I heard there was lots of work there, but I could not get any room in San Pedro. I told a friend of mine, Mr. Johnson, I did not see how a man could work there and live in Los Angeles. I heard about Harbor City, for a man told me I could find a place to stay down there. Mr. Johnson told me I could sleep in the hall in a building in Harbor City so I went down there and I slept there two nights. Mr. Preston did not guarantee me any work but said he would help me. Mr. Preston took me down to the plant with four other men, and the man who hires the men at the plant came out and just picked out so many of us. I was standing next to him and he took me. He took four other men out of the crowd, but did not take any of the other people who lived in Harbor City. I bought my lot in Harbor City because I just came from the East and wanted California property because it was good weather here. I knew there was plenty of work here, but the trouble was I could not find any place to stay in San Pedro and for that reason came to Harbor City. They told me that buying a lot at Harbor City was a good investment. Nothing was said to me about getting a job if

I bought a lot here. I like it very much at Harbor City and it is handy for me to live here and work at San Pedro, but I do not know how long my job will last at the shipyards. There are a great many men working there and some of us will get laid off, I think, pretty soon.

Dated January 31, 1918.

H. GRILL.

STATEMENT OF MR. BOCK.

On August 14 last year I bought a house at Harbor City. I had been in busi-ess in Anaheim and came down to Harbor City on one of the excursions to ok around and that is how I came to buy the property. No one told me they ould guarantee me a job at the shipyards, but they said if I wanted work ey felt sure they could help me get it, but I went down to the plant and got e job myself. There were about 500 men working at the plant when I went wn there, and Mr. Sanborn said he needed men and would be glad to hire me. t first the car service was not very good, but it is much better now. I find very convenient to live here and work at the shipyards. Mr. Burrows gave e a card to Mr. Greenwood at the plant, but this was some time after I had ught the place. I do not believe that the card given me by Mr. Burrows cured my job at the shipyards, as I got the job myself, but W. I. Hollings-orth & Co. have always given me a square deal. There are a great many ore men employed at the shipyards where I am working now than when I ent there. I believe there are about 6,000 men working there at the present me.

Dated January 31, 1918.

N. R BOCK.

STATEMENT OF MR. R. A. DEVITT.

I live in Harbor City at the present time. I purchased a lot here about the d of November, last year. I know if a man comes here and wants to work, e is sure to find it. I did not buy my lot here for the purpose of getting any lace to work. Mr. Preston told me one day that a man by the name of Hick-nan, the plumber in San Pedro, wanted some men and asked me if I cared to o over and try the job. I went over to San Pedro and worked for Mr. Hick-nan about one and one-half days, but found the work too heavy for me. I ave since been working around the tract for different persons.

My son spoke to Mr. Preston about getting employment somewhere. He told Mr. Preston that he wanted to get a job driving a truck, if he could. Mr. Preston took him over to the Crown Sash, Door & Mill Co., here in Harbor City, nd my son obtained a job there and is still working for them.

At the time I bought my lot nothing was said to me about being guaranteed position anywhere if I purchased the lot. The Hollingsworth people have lways done the right thing by me and kept all of their agreements. I have ever known of them charging anyone anything or insisting upon a person uying a lot before they would tell them of any jobs they knew of, or assist person in getting employment.

Dated February 1, 1918.

R. A. DEVITT.

STATEMENT OF MR. TIBBETTS.

I came down to Harbor City about the 28th of August, 1917, and bought half acre of land. Prior to coming here I worked at the Anaheim Sugar fac-ry. After I purchased my lot I went over to the shipbuilding company to t a job. I was given a letter of introduction by Mr. Burrows to Mr. Green-ood. When I went over to the shipyards I did not see Mr. Greenwood and d not present my letter, but I got a job without any trouble. The Hollings-orth people did not tell me if I bought my lot they could guarantee me a job ywhere. They told me that there was work around Harbor City and if I as looking for work I could probably get a job.

I have never heard anyone say that Hollingsworth Co. charged them any-ing for assisting them in getting employment anywhere. Everyone I have

talked with around Harbor City are perfectly satisfied with their arrangements and all tell me they have come here to stay.

I prefer to live here rather than in Los Angeles or Long Beach, as it is much closer to my work.

Dated February 1, 1918.

HARRY TIBBETTS.

STATEMENT OF MR. WHEELER.

I have lived in Harbor City about four weeks. I bought a lot here. I bought my lot from W. I. Hollingsworth & Co. Nothing was said by the Hollingsworth people about guaranteeing any positions in case I bought a lot. They told me they would assist me in getting work if I wanted to go to work. I am working at the shipyards at present. I got the position there myself. They had nothing to do with my getting the job.

I went over to the shipyards and they told me when they were hiring men they would give me a job. I was there nearly two weeks before I finally got on and went over nearly every day. No preference was shown me because I came from Harbor City.

I have never heard anyone from Hollingsworth's office, or any of their agents, tell anyone they could guarantee them a job at the shipbuilding plant. I have heard statements that there was plenty of work at the shipyards and know that to be a fact.

I know a man by the name of Jennings who bought a lot, but he gave it up and his money was refunded to him. He went over to the shipyards the next day and got a job. I have talked to him recently and he told me that he was coming back here to Harbor City and buy a lot, probably about the next pay day.

Dated February 1, 1918.

GEORGE W. WHEELER.

STATEMENT OF MR. E. A. THOMAS.

My father came over to Harbor City on an excursion and bought a lot. Afterwards I came down and bought one, too. It was my intention to buy land somewhere and settle down. I had been living prior to coming here in Santa Ana and working at the sugar factory there. I am working at the shipyards in San Pedro at present and have been working there about one month. I was down to the shipyards four different times looking for work before I got a job. That was before I came to Harbor City. When I came down here to buy a lot Mr. Preston, when I told him I wanted work, said he would help me get something to do if he could. He said nothing about guaranteeing me a job if I bought a lot. After I bought my lot I went over to the shipyards and they were needing men and put me on. I like to live in Harbor City because it is close to the shipyard and I like the location, and bought my lot with the intention of settling down here.

Dated February 1, 1918.

E. A. THOMAS.

The CHAIRMAN (continuing). The American International Shipbuilding Corporation have certain witnesses here whom they wish the committee to hear.

Mr. Baldwin, are you ready to proceed?

Mr. BALDWIN. Yes, Mr. Chairman; but may I say one word before Mr. Connick takes the stand?

The CHAIRMAN. Yes; certainly.

ADDITIONAL STATEMENT OF MR. GEORGE J. BALDWIN, CHAIRMAN OF THE BOARD, AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, NEW YORK CITY.

Mr. BALDWIN. We felt that a great deal of the testimony that had been offered before this committee, was, perhaps incomplete, and that,

so far, the committee had not had an opportunity of knowing accurately what the whole situation was. We felt that if the matter was left at this stage not only our own reputation was at stake, but great harm might be done to the Nation itself, if by any chance, through testimony that was not complete and accurate, the Senate committee should render a wrong judgment in the matter.

We also felt that it was a duty that we had to present this to the committee, because we are an arm of the Government, we are a part of the Government, as a part of the Shipping Board. We are asking not as contractors, but as definite agents for the Government; we are acting for the Government itself.

We therefore come to you with no attorneys and no counsel, excepting such counsel as we have had to assist us in preparing the facts, so that we can present them definitely and concisely to you, but not as attorneys, because our attorney is the Attorney General. We shall rely absolutely on him to present any legal element that may project itself into the case, and we feel that he will do it, and we rely entirely upon him.

Mr. Connick is ready to take the stand now, Mr. Chairman.

STATEMENT OF MR. HARRIS D. H. CONNICK, VICE PRESIDENT OF THE AMERICAN INTERNATIONAL CORPORATION AND THE AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION; RESIDENCE, GLEN RIDGE, N. J.

The CHAIRMAN. Mr. Connick, please state your name, age, and place of residence.

Mr. CONNICK. My name is Harris D. H. Connick; I am 45 years old; and I reside in Glen Ridge, N. J.

The CHAIRMAN. What is your business, occupation, or profession?

Mr. CONNICK. I am a construction engineering expert in connection with business.

None of you gentlemen know me, and I would like to take just a few minutes to tell you what I have done, what I have been doing, so that you will know as to whether I am properly qualified to perform the duties that I have now undertaken.

The CHAIRMAN. We shall be glad to have you make a statement as to that.

Senator NELSON. Excuse me, but I did not understand your name.

Mr. CONNICK. My name is Connick.

Senator NELSON. What position do you occupy with that corporation?

Mr. CONNICK. I am vice president of the American International Corporation and vice president of the American International Shipbuilding Corporation. I am also a member of the board of directors, and I am on the executive committee of the last-named company.

Senator NELSON. You are now on the salary rolls of the Government, are you not?

Mr. CONNICK. No, sir.

Senator NELSON. Who is paying you?

Mr. CONNICK. The American International Corporation.

Senator NELSON. I thought the Government was paying you.

Mr. CONNICK. It is not.

The CHAIRMAN. Will you proceed, Mr. Connick? I was leading up by my questions to qualify you in my own way.

Mr. CONNICK. Yes, sir.

The CHAIRMAN. But perhaps you can state it better yourself.

Mr. CONNICK. Well, I was educated at the Leland Stanford Junior University, in California, as a civil engineer. Then I started out as assistant to the county surveyor in Humboldt County, Cal., and as such I surveyed roads and built roads, surveyed and built bridges, and did all the things that a man does when he works for a county surveyor.

Then I went to work for the Southern Pacific Railroad as a topographic engineer. Then I worked on that Clark line of railroad between Salt Lake City, Utah, and Los Angeles, Cal.

Then I went to work for Mr. Grunsky, who was city engineer and sewer commissioner of San Francisco. I helped him design the drainage system of San Francisco when he was drainage engineer. I worked on sewers, and roads, and bridges, municipal buildings, estimates, and all of the things that they call upon a city engineer to do; and in time I became chief assistant city engineer of San Francisco.

About that time the earthquake occurred in San Francisco, and my duties after the earthquake were rather heavy in a way. I helped to clear that town up. I repaired the sewer system, and repaired the roads, and the pavements, and the municipal buildings. I treated the estimates and data, and went before the proper governmental bodies, and explained the estimates in order to get bond issues through, so as to get the money from the sale of bonds with which to pay for city work. Those bond issues aggregated over $50,000,000. After we had taken the proper legal steps and the bond issues were authorized, we went before the people and explained in detail what we were going to do with the money. And when the bonds were issued we spent the money in the building of sewers, roads, pavements, waterworks, docks, power houses, tanks, hospitals, buildings of all sorts. Our office had to do with the rehabilitation of the city of San Francisco, so far as the board of public works was concerned. We had experts; we coordinated experts, the best experts we could get, and we reported on all the various things that came before the city engineer. And as assistant to the engineer I had certain things to do in connection with that.

Finally the Panama-Pacific International Exposition came along. I was made director of works; I built that exposition. That was the last big international exposition. As director of works I had complete charge of every physical thing on the grounds; you could not nail two boards together without seeing me. I filled in a lagoon there of 70 acres; filled it full of piles, put the buildings on it; installed a telephone system in the grounds, installed gas-distribution systems, hired the experts that provided the beautiful part of the exposition, the architects, and the artists, and that sort of thing. I put all those things together.

After that exposition was all built, including the hundreds of buildings there, I operated the physical part of the exposition; I was the director of works. I had exactly the same position that Dan Burnham had at the Chicago Exposition. I had charge of the fire

artment, the police and health departments; and any man that ne on those exposition grounds was in my charge until he left: l there would be 400,000 people there in one day. After the exition was over I cleared up the buildings and everything, and ned the ground and returned it to the owners. We had over acres of ground there, beside the land that the Government upied; and we returned that ground in as good condition as we nd it, or better.

Then I came on East and joined forces with the American Interional Corporation. The first thing they gave me to do——

Senator NELSON (interposing). When did you come East and join m?

Mr. CONNICK. That was about a year ago. And the first thing they re me to do was to go down to the New York Shipbuilding Corration, in which they had recently acquired a large interest; to down there as a business expert and see how that thing was funcning. I had to go through the whole organization, and see how rything was working, and if there were any petty jealousies among various head men; and see if there were any men under the head n ready to take their places. I had to study the production of ps to see that the production of the various parts was balanced. tudied each one of the contracts to see whether they would make a ofit or not. I went over that whole situation there and made a dy of the shipbuilding lasting several months.

About that time we got into this submarine proposition. We had grams prepared that showed the rate at which the tonnage of the rld was being disposed of by the Germans, and the situation bene rather alarming.

Mr. Baldwin, in view of my past experience, put it up to me to vise ways and means to see if we could get some way to replace at tonnage that was being lost. I hired some experts, and got gether a corps of men, and we studied the problem. I was familiar th what they had been doing at the New York Shipbuilding Yard. I went back down there and went over the whole situation; and in few hours I found out that this was what they were doing—here s the way that they were building a ship: They prepared plans, the greatest detail, of a ship, in the drafting room; and then y sent those plans out to a place called "mold loft," where they de wooden patterns of the various component parts of the shell of ship; those patterns were sent to a plate and angle shop; and re the steel pieces were fabricated, so to speak—that is, they were pped up and holes punched in them—and in due time they were en out and piled on the ground. But then they had all been numred and had all been marked and identified, so that the ship ctor, when he picked up any one piece, could tell just where in the p that piece belonged.

Senator RANSDELL. That was all done on the ground, was it?

Mr. CONNICK. That was all done on the ground; but the thing that knew, and which I want to bring out, was that the men in the plate d angle shop and the men in the mold loft did not have anything do with the men in the ways.

Senator NELSON. Where was that yard of which you are speaking?

Mr. CONNICK. That was the yard of the New York Shipbuildin-, at Camden, N. J. The men who built the engines and the m

who built the boilers there had nothing to do with the men in the ways.

Now, that New York shipbuilding yard consisted of these things It consisted of a mold loft here [indicating], and a plate, and angle shop here [indicating]; and here [indicating] was a machine shop; and here [indicating] would be the ways down here where they were using about 5,000 men. They use more now, but they were then using about 5,000 men. And these men down here [indicating] did not know what these men [indicating] were doing. There were several hundred feet between the plate and angle shop and those ways; there was no reason why there should not have been several thousand, or several hundred miles; it would have worked under that system just as well.

And that system has been going on for years. The man who built those works was a bridge builder, and he worked that plan with more or less success; but in the 17 years that the company has been in existence they perfected that system. That was an assembled ship, but it was not known as such.

We studied the conditions there, and we studied the conditions in all the existing shipyards in the United States; we got the best data that we could as to what they were doing, how many contracts they had on hand; as to whether they could be expanded or not. And here is what we found: We found that all of those big shipyards—there were only six or seven of them—had only 33 big ways.

Senator NELSON. Is that the New York Shipbuilding Co.?

The CHAIRMAN. No; all of them.

Mr. CONNICK. All of the big yards combined.

Senator RANSDELL. All of the shipyards in the United States combined had only 33 ways?

Mr. CONNICK. That is all; only 33 big ways. That was all that I could find.

Senator RANSDELL. Will you define the word "big' in the sense in which you use it there?

Mr. CONNICK. I will do so.

Senator NELSON. Do you mean that in the entire country there were only that many?

Mr. CONNICK. Yes. A big way, we will say, would be one that could put out a vessel of 400 tons dead-weight all over.

The CHAIRMAN. You mean 4,000 tons, do you not?

Mr. CONNICK. Yes, 4,000 tons; and there were only about 33 of those ways in all those yards. That did not include the Government yard; there were four or five ways in the Government yard.

Senator NELSON. Among how many yards were those ways distributed?

Mr. CONNICK. The Fore River, Cramps, the American Steel, the Newport News, the New York Shipbuilding, and the Union Iron Works.

Now, the New York Shipbuilding Co. ways were peculiar. They were quite wide, and on some of them you could put two ships, provided the ships were not too wide. But if you had a battleship on there, she would take one whole way; you could put on at the same time two torpedo boat destroyers, or any small ships on those 33 ways. And I suppose in that way you could get 43 boats at the out-

side on the ways of those various shipyards; that is, by fitting them around and fitting them together.

Well, we found out that that was what the New York Shipbuilding Yard was doing; they were really fabricating a ship. We studied the situation at the various yards, and found all the yards full. We studied the labor situation at each yard; in the case of some of the yards we found that we could not enlarge them, because there was no provision for labor.

We soon struck the stumbling block as to why you could not enlarge yards. It was on account of the tool question. The war has been going on for a long time, and there has been a tremendous demand on American manufacturers for tools. I found that the New York Shipbuilding Yard was trying to get new plate rollers, for instance, as well as other tools, but they could not get them; they were not to be had anywhere. So that we found that there was no need of extending our existing yards.

Senator NELSON. Had your company acquired any interest in this yard at that time?

Mr. CONNICK. We had acquired a substantial interest in it.

Senator NELSON. You had acquired an interest in it before you went up and examined it, as you have described?

Mr. CONNICK. Yes; that was why I went up there to examine it.

Senator NELSON. Your company had owned it before that?

Mr. CONNICK. Our company had owned it before that. The New York Shipbuilding was an old company that had been in existence years: it had been in existence 15 years before we acquired it.

The CHAIRMAN. What work were they doing at that time?

Mr. CONNICK. Work of all kinds. They had the battleship *Idaho;* they had oil tankers, colliers, merchant ships—they had everything except submarines, and probably torpedo boats.

Senator NELSON. You took the entire yard over, did you?

Mr. CONNICK. We took over the entire yard; yes.

Senator NELSON. With the force of men and everything?

Mr. CONNICK. Everything went right over; yes.

The CHAIRMAN. How many ways did they have at that time?

Mr. CONNICK. They had five double ways: some were wide enough to take on two boats at the same time, depending, of course, on the width of the boats.

Senator NELSON. At what time did you take that yard over?

Mr. CONNICK. I do not remember the exact date we turned it over. I went down there just about a year ago on that examination.

Senator RANSDELL. Were the methods which you have described as to that shipyard substantially the same as those prevalent in the other big yards of the country?

Mr. CONNICK. No. They had carried this method of assembling much further in that yard than in other yards, because the man who started the scheme was originally a bridge builder: he was not a shipbuilder.

Senator RANSDELL. I see.

Mr. CONNICK. When we got into this thing, we simply eliminated the possibility of extending our yard. It was not practicable; it could not be done, and it would have cost tremendous sums of money if it could. It would have meant duplication of tools, and one

thing or another in all these various yards; and they would not all have worked to 100 per cent efficiency—I mean the tools would not have worked to 100 per cent efficiency—and we would have had one tool at one yard, and one tool at another yard. And for these reasons we worked upon this scheme: We decided that the only way to produce additional tonnage, and the country needed it pretty badly, I have a diagram here as to that that I would like to show to the committee.

Senator NELSON. Let me see if I understand you correctly. As a matter of fact, the New York Shipbuilding Co. was operating indirectly that fabricating plan. The only difference between this and the other system is that they did the fabrication in the same yard?

Mr. CONNICK. That is all.

Senator NELSON. Otherwise they operated on the fabricated principle?

Mr. CONNICK. Yes; to a very great extent.

Senator NELSON. Yes.

Mr. CONNICK. And the people who built that boat out on the ways had nothing to do with the plate and angle shop, or with the boiler shop, or with the engine shop. They could just as well as not have been hundreds of miles away; and, as a matter of fact, they built boilers there for other shipyards, and sent them down to the shipyard on a scow, or got them there in some other way. That was one of their sources of income to quite an extent—the number of boilers that they built. The system was also worked over in another yard near there, which was run by a man named "Jack." He got onto this fabricating scheme; but he went further; he got his pieces of fabricated steel built by the American Steel Co., and shipped to him on cars. He did not apply that plan to the whole boat; but they took all the middle portions of the boat, all the simple parts of the boat, and had that work done there, and he put them together: he was running on this fabricated principle; and he had simplified the design of the ship to fit it. And that was something that the New York Shipbuilding Co.'s yard had not done; their designing plant was conducted on the usual style of shipbuilding, you might say; while the operations out in the yard were being conducted on the assembling principle. That is one of the things that will come in due time—be coordinated. Well, we reached the conclusion that the only way to do this thing was to start a brand new yard on this assembling principle, in some place, and mobilize the industries of the country that were not engaged in shipbuilding; if we interfered with these present shipbuilding plants and took their tools and labor and occupied them, we, of course, would not increase the tonnage; we decided that we had to go back of the line.

So we went back to the bridge builders, and the tank makers, and the metal workers of the country who were not engaged in war industries. We called in our naval architects, and we studied this problem, with a view of simplifying the construction of that ship.

We straightened the ship out at every place where we could; we took everything that was bent and made it straight, as much as possible, all the internal workings of the ship.

Senator NELSON. Do you mean that you prepared new plans?

Mr. CONNICK. We prepared, not a new plan, but we adapted—

Senator NELSON (interposing). I mean a new plan of ship?

Mr. CONNICK. We adapted the existing type of ship to fit this ondition; it was just an adaptation; that is all.

Senator NELSON. Yes.

Mr. CONNICK. Because we were going to make ships by the hunlred; that was our plan; and if we saved one rivet on a ship, we aved 200 rivets or more; we saved as many rivets as the number f ships we were building 200. If we could take just one plate, and revent the cutting off of an angle on it, we saved cutting that many lates that many times. And sometimes these plates repeat themelves a great many times, like the rivets; and so you could multiply hat was saved on one plate by the number of those plates in the hip, and by the total number of ships, and it would amount to housands of operations that would be saved.

We decided to build one big yard; we settled that point. We nterviewed a large number of manufacturers, and we found out that ome of them could make some parts of the machinery; we found, for nstance, that some man could make a pump, but that he was short n something that he could not get to make that pump; then we ound another man who would reinforce that first man and send him ome of the parts necessary to get that pump built. We found plants hich could manufacture the electric-lighting equipment, but which ould not get the generators; the plant could make the little engine nd all the necessary equipment, but could not make the generator; o we tied that concern up with another concern who could make enerators.

And by following that system out, we finally got something that oks like a tree in which all the various branches would be the housand and one things that go into a ship, and the trunk would e the ship itself.

We went up to see Gen. Goethals—Mr. Baldwin and I. We met en. Goethals and Mr. Ferris in his New York office one Saturday fternoon, and we told him just what we had in mind.

He saw the practicability of the scheme. He had known about it nd he said that two other groups of men were working on exactly e same principle; and they had reached the conclusion that it as the only way; that there was no other way in which the necesry number of ships could be made; we could not increase the capaty of the existing yards; we could not interfere with that; we had get entirely new resources.

Senator JONES. Who told you that—Mr. Ferris or Gen. Goethals?

Mr. CONNICK. We all agreed on it—Mr. Ferris, Gen. Goethals, and erybody. And we discussed a possible form of contract. We ld him that our contracts called for a 5,000-ton ship. He said that as the size that the Submarine Boat Corporation was working on, d that they were going to build 200 ships.

We told him that we had reached the conclusion that it would ke about 200 ships to work out this multiple production scheme so at it would be most successful.

We discussed a contract. He said he wanted a bigger ship; that e Submarine Boat Corporation was taking care of 5,000-ton ships, d that the Merchant Shipbuilding Corporation was going to build smaller number—I think 100 or 80, or something like that—of ther larger ships, about 9,000 tons; and he wanted something in

between; and he suggested that we try to work this thing out w
7,500-ton ship.

Now, that is an entirely different proposition. Every piece, al
in a 7,500-ton ship is bigger than in a 5,000-ton ship, and the
culties of an assembling job, to my mind, at that time seem
bear some proportion to the weight of the various portions o
ship, and we did not commit ourselves on any 7,500-ton ship.

We talked this contract over. We discussed the fee—10 per c
a contract on a 10 per cent basis.

Senator NELSON. It did not contemplate that your company
to invest a penny of its own, did it?

Mr. CONNICK. Not a cent; we were going to invest our reput

Senator NELSON. Yes.

Mr. CONNICK (continuing). Which, when you lose it, you ca
get back; you can get back your money.

Senator NELSON. That is a good thing; that is the way the
gets even with sinners once in a while. [Laughter.]

Mr. CONNICK. Well, we discussed this contract. He was to fi
it; he was to provide the money to build that yard; and we w
bring together the organization and develop the scheme and pu
thing over.

Senator NELSON. But you had the organization already, ha
not?

Mr. CONNICK. Yes; but that organization was engaged on
work. We had to take it from that other work; we were all wo
and busy.

Senator NELSON. Well, what became of the other job then,
you took all the men away from that?

Mr. CONNICK. We did not take all the men away from th
was going to speak on that subject in a few moments; but I w
like, if you will permit me, to take these matters up in order.

The CHAIRMAN. You may take the various matters up in the
which you prefer.

Mr. CONNICK. Thank you. We discussed this contract, an
tled upon these points: He said that he wanted 200 ships.
he wanted them in 18 months, and he wanted 7,500-ton ships.

I went back and got a lot of new experts, as well as some wh
been on this job before, and we started in to design a 7,500-ton
We got in touch with Mr. Ferris, who had been cooperating wit
and he prepared the general design of the ship, showing just
it would look like. It would look like a *Three Islands* freigh
just like the tramps that you see in New York Harbor all the
They carry the freights of the world. It took us some time to
that thing out.

I will have my assistants bring me that model over there
cating]. I wish to show you gentlemen what that ship is goi
look like.

Now, let me show you what we did with that ship [exhi
blue prints].

This may be a little hard to understand, but I think I can m
plain. This [indicating] is one of the drawings of the ship des
by Mr. Ferris for us. That [indicating] is a cross section o
the ship. Now, an ordinary ship generally has what they

"dead rise"; that is, this bottom plate [indicating] is on a slope like that [indicating]. Now, if you fabricated a ship like that you would have to cut all of these plates: you would have to perform two operations; after they came from the mill you would have to cut them all angular; and on every one of these angles you would have to have the corners cut. And, of course, there are thousands of them on a ship; and every one of those operations would cost a few cents. And so we squared up that bottom. We first investigated and found that there were a number of boats with flat bottoms like that which were being operated successfully. And you will bear in mind that ships all have a "tumble-home" on the sides, like that [indicating]. We straightened that out, because if it was not done so we would have had to take every one of the ribs on that boat, which is over 400 feet long, and these ribs are only a few feet apart—and we would have had to put them all in the fire and heat them and bend them. So we straightened that out.

And you know that the deck of a boat has a bow in both directions; the reasons for that is the necessity for drainage, and the fact that the boat is rocking around. But the decks of a battleship are as flat as this table [indicating], and so, after investigation, we took that boat and flattened the decks, so that all our decks became parallel.

One of the complicated problems in a ship is the housing, because the deck of a ship is not like this table; it has a bow this way [indicating] and a rise that way [indicating]. The result is that every door has a twist in it. The captain's desk is not square; you can not buy a desk from the desk factories for that purpose; you must make one. And all the little fittings in the galley of a ship are out of square. The result is that there is a tremendous amount of money that goes into that factor of ship construction.

Then we took that ship and we straightened the masts up. I have drawing of that ship here that I want to show the members of the committee [exhibiting blue print]. There has been some testimony introduced before this committee that these ships did not look like boats at all, but look like a steel frame building lying on its side.

Now that [indicating] is as fine a looking boat as you ever laid our eyes on. But the smokestack is straight—all of these things e straight. On an ordinary ship, that railing [indicting] is bent. n this boat everything is square. In an ordinary boat that is curved ke that [indicating]; that costs a lot of money. We took that thing id we ironed that boat out and we squared it in this way.

And that was done for a good reason: The bridge builders and the nk builders are not familiar with this skew-geed work of a shipard, and it would be hard for them to comprehend these plans. And e wanted to make a plan of a ship and send it off a thousand miles a bridge shop or a tank shop and tell them to straighten the thing it and manufacture them for us. We made, as far as possible, erything on that ship the same.

Now, the question immediately arises, "What did you sacrifice?" e did not sacrifice the structure of the ship, because Lloyds have assed upon the ship and have given us an A-1 rating, and that is e highest that you can get.

Senator SMITH. Do you mean it was standardized?

Mr. CONNICK. It was standardized to the limit; we took every piece in the ship and examined it to see whether we could reduce the number of operations involved. We called in the shop men; we called in everybody we could get hold of and had them study that ship. We not only did that but we got other firms to do the same thing.

And Gen. Goethals told us to do that; he told us to cooperate with those other firms in every way possible, because otherwise, he said, "Here is what will happen: You will all try to get your pumps from one place; you will all try to get your boilers from one place, and so on; and in that way you will have those places congested so that they can not produce what you want. But you should distribute your orders around over the industry throughout the country."

And for that reason we got together and studied the situation, particularly with the Submarine Boat Corporation, who were building a boat smaller than this. And so we studied the situation and found out where we could get these things distributed around through the country. Then we developed plans like this, only further along.

Then we went over and saw Gen. Goethals. Gen. Goethals agreed that the scheme was practicable; and he was still of the opinion that this was the only way that we could proceed and get the necessary number of ships.

Senator SMITH. That is, you were aiming at expedition?

Mr. CONNICK. We were aiming at speed; anything to get the ships quickly. Let me show you this diagram [exhibiting diagram]. This shows you what is happening to our ships. Here [indicating on diagram] is the normal increase in the world's shipping. That means what they are building, less what would be sunk in ordinary times and what would go out of use. Here [indicating] is what the Germans are getting away with. Here [indicating] is what we estimated the Germans would get away with; and here is what they are now doing. They are now doing much better than we figured out that they would do; and so the situation is much worse for us than we thought it was. Here [indicating] is what is required in the way of ships for military service. Now, the available ships supposed to carry on the commerce of the world have been decreased as indicated by this line [indicating]—only more so, because the Germans have done better than we estimated they would.

Senator RANSDELL. You mean they have been more destructive?

Mr. CONNICK. Yes, sir; they have been more destructive than we thought they would be—quite a little bit; the percentage is quite a lot more.

Now, I want to call your attention to this model [indicating model of ship]. Here is the model of that ship. You know it has been said that she looks like a steel-frame building. Now, you can see that that ship is just an ordinary, good, old-fashioned tramp steamer, of the *Three Islands* type; they call it the *Three Island* type, because of these three things here [indicating on model]. Here [indicating] is the bow, and she is cut away in the stern, so that the water will flow down to the propellers and you will get the maximum of efficiency from your power plant. We had that model developed in a larger size, and we had it towed, to see just what would happen to a ship with a flat bottom.

Senator JONES. When did you have that model prepared [in-
licating]?
Mr. CONNICK. This model [indicating] was prepared several days
go, because the old model was too large to bring into the committee
oom.
Senator JONES. Had Mr. Cotton seen that old model?
Mr. CONNICK. No; Mr. Cotton acted as attorney in this matter.
ot as a structural man.
Senator JONES. I understand; but I just wanted to know if he had
en it.
Senator HARDING. You might say to the committee, Mr. Connick.
at the model you have in your yard is half as large as this com-
ittee table [indicating].
Mr. CONNICK. It is quite a bit larger than this model; and it has
be towed, just the same as they do for the naval vessels, in order
be absolutely sure that the resistance is not too high, and that you
ave not got an impracticable thing. For instance, if this is not cut
way just right here [indicating] and in here [indicating], your
oat does not work as efficiently; you do not go as far with a ton of
al, and all that sort of thing; your operating expenses would go
ight up. So we wanted to find out how this square section would
ork. You see that [indicating] is a perfect plane.
Senator NELSON. You have a keel on that boat, have you not?
Mr. CONNICK. No; they do not build keels on ships of this kind;
e keel is inside the boat, just like the backbone in a human being.
Senator NELSON. I thought they had a keel on those boats that in
me way reached into the water to balance the ship?
Mr. CONNICK. No; it does not balance the ship; the ship balances
elf; it does not need balancing. The science of naval architecture
an exact science; and they figure this thing out, and distribute the
ight of the ship so that they will know in advance just exactly
ere she will sit in the water; they know just how much she weighs.
nd in order to get this ship light, we cut holes here and there [in-
cating] in the structural members, where we could do it, and
ereby reduced the weight. But that model gives you an idea of
at ship.
Senator NELSON. Well, when you get into a storm with that kind
ship, and the cargo begins to shift, you can not keep the ship on an
en keel, can you?
Mr. CONNICK. The cargo will not shift, if it is efficiently stowed.
at is the business of the captain and the officers of the ship, to see
at the cargo on that ship is properly stowed so that it will not shift.
at has nothing to do with the construction of that ship.
Now, you can see that there is nothing strange about that ship.
ere is no mystery about these ships. A lot of people think there is.
ship is nothing but a steel frame, covered with a tank plate, you
ow.
(Thereupon, at 2.58 p. m., a recess of 15 minutes was taken on ac-
unt of a roll call in the Senate; afterwards the following proceed-
gs were had:)
The CHAIRMAN. Mr. Connick, you may now resume your statement.
Mr. CONNICK. I want to explain some of the difficulties in connec-
on with this thing [indicating model of ship]. For instance, in

connection with the stern of this boat, it is very unusual. When we got onto this problem, we found that if we put on the usual stern of cast steel, with the demand for steel castings that then existed in this country, we could not get the castings; they were not to be had. So that we had to get up a new kind of stern. We had to study the thing out: we wanted something practicable; we did not want to adopt any mere dream of a draftsman. So we had to take the question up and study the sterns of all the vessels that did not use the cast steel. And we found that in the north of England they were using sterns like this [indicating], and that it was a well-known device there. Somebody has made some comment on this stern [indicating]: and so I wanted to tell you gentlemen that. There was one thing about that keel that did not seem clear to those of the committee that did not go to the yard and see that keel standing up. The bottom of this ship is just like this table [indicating], and the keel stands in the middle of it, but it is inside the boat; sailing vessels have the keel outside.

Senator RANSDELL. Does that keel run the full length of the boat?

Mr. CONNICK. Yes; it is the backbone of the boat. When they say that a ship is broken in two, that is what happens to it [indicating]. The keel gives the boat strength longitudinally.

The CHAIRMAN. When the boat "hogs," what happens to it?

Mr. CONNICK. The same thing; the middle of the boat goes up, and the ends bend down.

Senator RANSDELL. That sometimes happens in the case of wooden ships?

Mr. CONNICK. Yes; they sometimes make the wooden boats too long; that is the difficulty of wooden-boat construction. And it might be interesting in this connection to say that we gave consideration to the building of wooden boats; and we finally decided that we could get the boats quicker if we made them out of steel, and we knew that we were not experimenting on a great, big, long boat: everything that we were doing had been done before.

We went down and took all of this to Gen. Goethals, and showed him how we had coordinated the thing. He still stuck to his formula: he wanted two hundred 7,500-ton ships in 18 months. We explained to him how we were going to build the ships. I will explain that now:

We were going to build these ships in groups of five at a time. And the reason for that is that we found out from our experts, and our data that we had obtained from other shipyards, that this thing will work out, in a manufacturing way, much better on that plan: that is, you finish one thing and then go on another. We are going to start a man riveting on ship No. 1, and then he goes to ship No. 2 and puts exactly the same rivets on that, and then he goes to ship No. 3 and puts the same rivets on that, and then he puts the same rivets on ships Nos. 4 and 5.

By that time he goes back to ship No. 1 and begins all over again with other sets of rivets.

Now, that is exactly the same principle of assembling that they have had in the manufacture of watches in America, and in the manufacture of machinery and of locomotives and automobiles.

There is nothing new about it at all. except that in those cases the thing which is being manufactured moves along: it is on a long. moving table. and the men working on it stand still.

Now, instead of moving the ship. what we are going to do is to move the men: and we will have the equipment to enable us to move them from ship to ship. and they will go through a cycle of five. and by the time a man is through with a particular piece of work on the five, he will go back and begin over again. And the great. big advantage of that is that you do not have to teach a man to drive all kinds of rivets. We can take a man who has been riveting steel-frame buildings. or a man who has been riveting steel tanks. or cars. or we can take almost any man who has been working in the metals trades and we can put him in a school that we are running. and in a few weeks we can teach him to drive the particular class of rivets that he is going to be called upon to drive. He does not have to learn to drive them all. heavy and light. etc.: he will drive but one kind of rivets.

That means. in a way. standardizing labor for this purpose. as well as standardizing the ship: and it is going to be easier to construct the ships on that basis than it would be if we just turned more or less of a mob loose on the ship and have a man driving rivets on the stern of the ship and then have him go to the bow. and then to the engine. and then to the pilot house. The man who works on the pilot house on this ship is only going to work on pilot houses.

You have had witnesses appear before the committee who have described the fabricated ship and complained more or less about the difficulties that we will encounter. We know about the difficulties. but we are sure that we know where they are. and we have developed solution of them. We have been studying this thing. and have been studying it for months with experts. Those who have criticized it have studied it for a few hours.

For instance. one thing that nobody has mentioned is how we are going to build the sterns of these ships: nobody has told the committee about that. And yet it is a very radical departure from previous practice. If they had known anything about our plans they would have known about that. but they knew nothing.

The reason is very simple. There is the stern of this ship. [Indicating.] You can see that it is a plane. We have got all of these sterns to build. and so we are not going to build them on the ways first: we are going to put that work in an erecting shop and put the stern together. It is just like working on houses from the inside out: and it will be easier to do it that way. We are only going to bolt up certain portions. and we will have the pieces bolted together. instead of riveted: and that stern will come in in big sections. then we are going to pick it up. and by driving a few rivets in the stern where it is separated and putting it on the way we are going to hold it together.

Some of the men who have appeared before the committee have told you that it was the speed of riveting that regulated the speed of the building of the ship.

That is not true in this case: it is the speed of building that stern [indicating]: and if we can build those sterns fast enough we can get the ships fast enough. That is the keynote of the whole thing. This middle section [indicating] does not give us any trouble

of the old shipbuilders told me in the beginning of this work: "You will have no trouble with the middle; it is these ends that cause the trouble."

Senator RANSDELL. Are you going to build those ends on the ways?

Mr. CONNICK. We are going to build those ends in the shop and then pick up the pieces with a locomotive crane and turn them over and run them out on the ways.

Senator RANSDELL. They will be built in shops close to the ways, will they?

Mr. CONNICK. Yes, sir; near by. And you can see how much easier it is to work on that surface [indicating on model] in that manner than it would be to have to do the work on the ship in the way.

We gave consideration to doing this work in a number of different yards. That is the first thing we considered. To build 200 ships in 18 months means 50 ways—and anybody tells you differently does not know anything about it; they have not given sufficient study to the subject to know anything about it. We have spent the money necessary to demonstrate that that is exactly what happens—and it was our money, and not the money of the Government. We have hired experts, and we have proved it again and again that it takes 50 ways to produce this number of ships within the prescribed time.

We thought we would split it up, instead of putting 50 eggs in one basket; but we had to put 50 ways in one basket; you can not find many places to put 50 ways in this country.

The trouble right at the beginning is, Where are you going to get the necessary number of men to top that organization? If you can get these five groups of head men to top those organizations, why not build five sets of 50 sets of 50 ways and have 250 ways? You can not do it. We could not find the men. We are in the construction business, and we think we know more construction men, or at least I will say we know as many construction men, as anybody in the country. It has been our business for years.

Senator NELSON. I would suggest that it might be better for you to give the committee facts instead of arguments.

Mr. CONNICK. Well, I want to give you my opinion as I see it.

Senator NELSON. Yes.

Mr. CONNICK. I have been in this thing, and I felt that I would not be fair to the people unless I let them know just what I mean in connection with this thing.

We finally settled on a 50-way yard. Then the question came up, Where to locate it? We took up this coast; we talked it over with Gen. Goethals. We thought anywhere from Boston to Baltimore would do, in the first blush of the thing. The trouble was that we had to have a yard where we could get in 300 carloads of material every day. We had to have a large amount of electric power available. We will use our power at the same rate that they use power in the city of Providence, R. I.; and we will use fresh water at the same rate that they use it in the city of Minneapolis, Minn. We had to have a water front 2 miles long to take care of the ways and the wet basins. They had to be on deep water.

The CHAIRMAN. Where do you get your electric power?

Mr. CONNICK. From the city of Philadelphia; we get the surplus power there.

The CHAIRMAN. And not from a plant of your own?
Mr. CONNICK. No; it is brought to us at high voltage, and we step down at a substation.
The CHAIRMAN. Is it a municipally-owned plant?
Mr. CONNICK. It is operated by the public utilities corporation ere.
The CHAIRMAN. What do you have to pay for it?
Mr. CONNICK. I do not remember the details of that.
Senator NELSON. The Government pays for that, I suppose?
Mr. CONNICK. The company pays for the power.
Senator NELSON. Your company does not pay for it?
Mr. CONNICK. No; the Government pays for the power, just the ne as they do for the steel and the rivets.
Senator NELSON. And for installing the electric lights?
Mr. CONNICK. Yes; and for the current used for the electric ht—the men working night and day.
Now, this yard had to be far enough away from the ocean so that ey could not throw a shell into it. We talked about New York arbor; we considered sites out in The Bronx, New York City. We nsidered sites in Boston, but we could not use the sites there; we uld not get the necessary power. New York Harbor had several es. Hackensack Meadows had some sites; Tremley Point was a etty good site; and we discussed with the Submarine Boat Co. the oblem of labor if these two big shipyards should be one alongside the other. We also discussed that with Gen. Goethal; and the nsensus of opinion was that we had better separate those two big rds; labor troubles might start in the United States, and you uld not tell what would happen if those two plants were side by e.
We also went down to Baltimore and considered that. We worked along the coast, and we finally settled that the Delaware River s the place. We considered different points on the Delaware rer. We considered the Tinicum Island property, below Hog and. We considered the Scott property, below Hog Island; and considered Pettys Island, on the opposite side from our plant.
Hog Island possessed fewer disadvantages. We [illegible] the dis- vantages. One of them was the disadvantage of getting the labor the island. There was a big tract of land, but there was no icient transportation facilities to haul the labor down from Phi- phia to Hog Island. Furthermore, there is only one [illegible] dge from Philadelphia, and it is a swing bridge, and if it got out order people might be marooned on the island. There is [illegible] senger transportation. Furthermore, it was right in a [illegible] ere they were making a lot of munitions, and [illegible] reat demand there for labor.
But there were advantages. We had the [illegible] level; it is on deep water. There were only two [illegible] h, and they were [illegible] ere was electric power available; we could [illegible] enough to supply Pennsylvania. [illegible] n. The land was well [illegible] fore the commission [illegible] ere was a dike on that property [illegible] d the drainage was pumped [illegible]

Another advantage was that it was near the New York shipbuilding yard; it put the experts of that company right across the river from us, which was a good deal better than having them many miles away. Another advantage was that there was an industrial center near there.

Gen. Goethals recognized the value of this site. There have been people before this committee who have said that it was not the proper place to build such a ship yard; but none of them have told you what was the proper place. If they had made the same investigation that we did, they would go right back to Hog Island. That was the best place we could find, and we have certainly searched thoroughly for a proper site.

We called on the owners and interviewed them. They wanted $2,500 an acre. We explained to them what this thing was for; and we forced that price down to $2,000 an acre. We called in the real-estate men of Philadelphia; and we got the records, as Mr. Baldwin has testified, of what the recent sales of property were in that vicinity.

Senator NELSON. Did you not know that the owners of that property had an option out for that property the year before for $1,000 an acre?

Mr. CONNICK. Yes, sir; but that was before the railroad got to it.

Senator NELSON. That was before you had your eyes on it?

Mr. CONNICK. Absolutely; but it was also before the railroad got to it. When the Pennsylvania Railroad put their road on the periphery of that property that property became much more valuable. That is the best terminal site to-day on the Delaware River.

Senator NELSON. That doubled the value of it?

Mr. CONNICK. All that I can say in connection with that is that we have done our best to get the price of this property down. We discussed it with everybody; we had nothing to conceal about it. They were going to get all the money; there was nothing in it for us. We talked to Gen. Goethals again about it, and he got his attorney, Mr. Cotton, in it—and here is where Mr. Cotton comes in.

Senator NELSON. Whom did he represent?

Mr. CONNICK. Gen. Goethals and the Fleet Corporation.

And we started to draw the essence of a contract. We brought our man, Mr. Robinson, in to it to help us. Mr. Robinson is one of Stone & Webster's partners and is very able in seeing that such contracts as this are made clear. That has been his business for years, in connection with his construction activities.

Senator NELSON. Did you take Stone & Webster into your company?

Mr. CONNICK. Not into our company at that time. Stone & Webster are affiliated with our company; they are one of the arms of it. I will explain that later.

The first thing they decided to do was to reduce the fee to a 6 per cent basis.

About that time the Denman-Goethals trouble commenced. We had a meeting in New York; and we were compelled to notify those gentlemen that we would abandon this contract; that we could not go ahead, and it was absolutely impossible to do this work unless the party of the first part and the party of the second part were harmonized, so that there would be no confusion in the house of either.

I talked to Gen. Goethals and Mr. Denman, and I personally old Mr. Denman—I had known him for years—I went down and old him that we were very sorry that we had to withdraw, we had o abandon it; it could not be done successfully——

Senator NELSON (interposing). What could not be done successully?

Mr. CONNICK. This thing could not be manufactured successfully rith the confusion in the house of the party of the first part: that is, ien. Goethals and Mr. Denman.

Senator NELSON. Oh!

Mr. CONNICK. Mr. Denman wanted me to give him a lot of data n this thing; and I went back and started in to prepare the data. ust before we got it prepared we received notice that Mr. Denman nd Gen. Goethals had resigned: that Mr. Hurley and Admiral 'apps were appointed.

In a few days they sent for me to come down here. I will read ou the telegram:

Referring proposal to build fabricated ships, can you arrange to meet me at ffice Emergency Fleet Corporation, Washington, Monday morning, 10 o'clock r afternoon 3 o'clock if more convenient. Please bring all data necessary to omplete understanding of the proposition, including schedule of estimated labor nd material.

CAPPS.

Senator NELSON. What is the date of that telegram?

Mr. CONNICK. August 4, 1917.

Senator NELSON. There had already been a contract prepared, nd there not?

Mr. CONNICK. No; just the essentials of how we would do it: just memorandum between our people, to get a lawyer to prepare it.

Senator NELSON. Had you made an estimate of what the cost of ie yard would be?

Mr. CONNICK. We had made some figures—and I will explain iose figures to you in just a few minutes. I want to try to carry long the history of this contract; and then we will go back and take p the question of this yard and make a complete job of it.

We took up this matter with Admiral Capps, and I explained to im the proposition just as I have explained it to the committee iis afternoon; and he understood it immediately; he thought there ight be some little matters of detail that might be changed, which ere matters of opinion; and he called in Mr. Hurley.

As a result of that conference, we received this letter [indicating]. his is a letter addressed by Admiral Capps to Mr. Baldwin, under ite of August 6, 1917. Just before we received this letter, Admiral apps stated that he had not the funds to build 200 ships, and he anted to build only 50 ships, and later he would increase the order, ; he got the funds. I will now read the letter:

TYPE CONTRACT.

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Washington, August 6, 1917.

r. GEORGE J. BALDWIN,
Vice President American International Corporation,
Washington, D. C.

DEAR SIR: The completion of the type contract which covers the class of ntracts I was discussing with you this morning has been delayed more than

I expected, so that I shall not be able to give it to you to-night, but the essential features, which require special consideration, are as follows:

The price to be named in the contract to be the estimated cost of the vessel based upon wages prevailing at the time of the execution of the contract and estimated value of material also based upon conditions prevailing at the time of contract, and an estimated overhead expense. These divisions of the total estimated cost will be, so far as concerns the material and labor, subject to a reduction or increase dependent upon the actual cost of the material and labor. For instance, if the owner should obtain material at a less cost than that named in the estimate, the base price would be decreased accordingly. If, on the other hand, material costs were more than noted in the estimate, the base price would be increased to correspond.

With respect to labor, a schedule of the prevailing rates will be attached to the contract and variations therefrom would similarly affect the base price. The estimate for overhead expenses would be liberal and should amply cover the actual overhead expenses. The fee to be paid the agent would be a definite amount per vessel and would take the form of a percentage of the base price not to exceed 5 per cent, and if certain penalties were imposed would not be below approximately 4 per cent. These percentages would apply to a group of approximately 50 vessels.

If, through liberal estimates or efficient organization or workmanship, the actual cost of the vessel is less than that indicated in the base price, the resultant saving in cost would be divided into three parts, one part being credited to the owner, one to the agent, and one to labor; the distribution of the part intended for labor to be as may hereafter be determined by the general manager.

There would also be a bonus provided for early delivery of vessel; also a penalty for belated delivery of vessel, a limit being imposed in each case so that neither bonus nor penalty could exceed a certain fixed amount. The bonus for early delivery would be divided equally between the agent and labor. This, however, is subject to further consideration.

The owner to bear the actual cost of establishing the assembling plant and to have definitely defined options at the completion of the contract. The agent also to have definitely defined options. Or, to put it in other words, the owner upon the completion of the contract to have the option of acquiring title to the property upon which his plant is established, and the agent to have the option of taking over the owner's plant at a price to be determined by appraisal in a manner definitely set forth in the contract, in general conformity with similar provisions in existing Navy contracts.

The above indicate, I think, the essentials of the proposed contract, the details of which can be discussed when I see you to-morrow morning.

Very truly, yours,

W. L. CAPPS, *General Manager.*

We had a meeting and Mr. Stone notified Admiral Capps to go ahead and get the contract up and he would take the work on his basis, provided a clear and definite contract could be worked out, that is, worked out in such a way as to protect us against loss.

There is nothing unusual about that contract.

Senator NELSON. What loss were you expecting when you were not investing anything?

Mr. CONNICK. Let me tell you about not investing anything. We had agreed to buy the land because the Government would not buy it.

Senator NELSON. You have got 6 per cent interest on that.

Mr. CONNICK. But we tied up our capital in that.

Senator NELSON. That is the only capital you have put into the thing?

Mr. CONNICK. Oh, no, my friend, it is not by a long ways. We developed this scheme.

Senator NELSON. What capital did you put into that? You took the force away from that other yard and you got up these blue prints.

Mr. CONNICK. That is our yard and these men are working for us—not these blue prints and this model, but other blue prints and

other models. We interviewed the manufacturers all over the country, and even now we bear a large proportion of the overhead of that yard. That is the capital we invested. This is, in fact, not an unusual contract. That is a fee like an attorney gets, a fee like a doctor gets, and it is a well-established way of making a contract. Just to give you some examples of that.

Senator NELSON. I never heard of such a contract before this shipping board entered into that.

Mr. CONNICK. This contract is an old form of contract. A large part of the Grand Central Stations was built that way.

Senator NELSON. Did you ever know of a shipbuilder to hire people to build a yard for him first?

Mr. CONNICK. No.

Senator NELSON. So you better not be so brash.

Mr. CONNICK. I am going to tell you about this contract. This contract is an old-established form of contract. I has been used a long time. I can name over 50 buildings where that has been used—used in Seattle, San Francisco, New York—it has been used for building railroads, power stations, and ships galore.

Mr. Powell testified here that he was building ships on percentage contracts. The New York Shipbuilding Corporation——

Senator NELSON (interposing). That is not the point I am calling your attention to.

Mr. CONNICK. I do not understand you.

Senator NELSON. That the shipbuilder builds the yard.

Mr. CONNICK. Yes, but he gets a greater percentage.

Senator NELSON. This is the first instance I know of in the history of shipbuilding where the parties that contract for the building built the yard too. Is not that so.

Mr. CONNICK. Absolutely.

Senator NELSON. Yes, sir.

Mr. CONNICK. Absolutely; but they built the yard for nothing.

Senator NELSON. You referred to other precedents. There is no precedent like these three contracts.

Mr. CONNICK. I am speaking of the type of contract.

Senator NELSON. There is no precedent where they built the yards for them.

Mr. CONNICK. They have not built the shipyards this way and then built the ships—no; that is a fact.

Senator NELSON. So you can not refer to that as a precedent.

Mr. CONNICK. But that is an old form of contract. Senator, after the contract was signed, Admiral Bowles made some studies of the German submarine sinkings. The Germans had got to building a bigger submarine, having a speed of 15 knots on the surface. And Admiral Bowles developed the fact that if you did not have 15 knots speed you were in some danger, and he called us down and said he wanted us to build some more ships about 50 feet longer, about an 8,000-ton ship with 15 knots speed. We took the matter up with him. We told him we were ready to help him; to get his contract up anyway he wished, and we would take this thing. He developed a contract similar in type to this and it was submitted to Admiral Capps, who agreed with it, and it required twice as many

boilers, it required twice as many turbines, and it was a much more difficult boat to construct. I have a picture of it underneath these papers. [Exhibiting picture to the committee.] You can see it is more complicated in a way and you can see how sharp she is, on account of the effort to get that speed. She is much bigger. This boat was to be used for sending troops across the ocean and to enable the convoy to have faster speed, and she is less liable to sink.

Senator NELSON. What speed were these large boats?

Mr. CONNICK. That is a little over 15 knots.

Senator NELSON. And the tonnage was 10,500?

Mr. CONNICK. No; 8,000 tons.

Senator NELSON. What was the speed of those 7,500-ton boats?

Mr. CONNICK. About 11½ knots.

Senator NELSON. And the others, the small ones, the 5,000-ton boats?

Mr. CONNICK. I am not familiar with those; they come under the Submarine Boat Co.'s contract.

Senator RANSDELL. Your company had the 7,500 and the 8,000 ton boats, did you not?

Mr. CONNICK. Yes. Another thing, these boats have got a peculiar stern, and when sitting in the water you can not tell the bow from the stern; you can not tell which way she is going from a submarine; at least, that is the theory. You can see how sharp she is here [indicating on model] as compared to this one. See how that is cut away to get the speed. These are all armed and they have larger rifles.

Senator NELSON. Do they not have more cut away at the stern, too?

Mr. CONNICK. Yes; to get the water. See how she is cut away so the water can get back to the propellers, because if you do not get the water to the propeller you do not get the power.

Senator NELSON. Do you build them with two propellers or one?

Mr. CONNICK. That is a single-screw boat. There was a lot of study given that, because there was a question whether they were to be built with two turbines or one, and we had to study the turbine capacity of the country. We had to look around and get the turbine manufacturers all in and work it out. Another thing, it takes twice as many boilers, it takes twice as many condensers, and they required twice as much power to shove that boat through the water, and even then you only got that gain of a little over 3 knots.

When Gen. Goethals was talking to us he talked right across——

Senator HARDING (interposing). Let me ask you a question right there.

Mr. CONNICK. Yes, sir.

Senator HARDING. You have said a good deal about looking ahead and coordinating the industries of the country. Was that all done at the expense of the American International?

Mr. CONNICK. That was all done before the contract was signed, and we had those men who did it on our pay roll. Gen. Goethals wanted to get an estimate of the cost of the yards. We told him we had not the data to make any estimates. Let me tell you what an estimate is worth. It is just worth the amount of data you have to base it on, and all we had on which to base anything was Hog Island, 18 months, and 200 ships and 50 ways. I called Stone & Webster down

Gen. Goethals wanted this estimate, as I remember it. He had something to do with appropriations that he wanted to get it for, and he wanted to obtain some kind of a figure. So I called Stone & Webster down, and I gave them all the data, as I have just told you. I said, "You can go down and take a look at the island, if you want to," and they made me up something based on 50 ways. I said, "I want it in three days," and in three days I got it. They sent me down an estimate—I have it here, the original document.

Senator NELSON. What is it?

Mr. CONNICK. $19,000,000 for the yard. The ships are estimated in a separate place.

I instinctively just put $2,000,000 on that estimate to use for appropriations, because I have asked for appropriations of money in the past, and have had to go back sometimes, and in this instance I wanted to be sure and have enough.

Senator NELSON. And that was the estimate you presented to Gen. Goethals?

Mr. CONNICK. And then I sent it down to Gen. Goethals and I explained to him just how poor that estimate was, and I wrote that letter—no; I did not, but I had Mr. Baldwin write the letter [reading]:

JULY 23, 1917.

Gen. GEORGE W. GOETHALS,
United States Emergency Fleet Corporation,
Washington, D. C.

DEAR SIR: We have your telegram of this date asking for detailed estimates for the proposed plant at Hog Island.

We have prepared preliminary estimates covering the plant, which we suggested for your consideration, but until a definite method of carrying out the work is settled upon and a definite plan adopted it will be impossible to make any estimate of cost which would be of real value as a basis of action. We inclose you this preliminary estimate, as requested.

Yours, very truly,

——— ———, *Vice President.*

That is not worth the paper it is written on.

Senator NELSON. Let me ask you this: Is that the only estimate that was presented and considered before the contract was signed?

Mr. CONNICK. That is the only one; yes.

Senator NELSON. The Government never had any other?

Mr. CONNICK. Not that I know of.

Senator NELSON. That has been testified to in the hearings before.

Mr. CONNICK. That the Government never had any?

Senator NELSON. That the only estimate came from your company.

Mr. CONNICK. I never saw any estimate by anybody else.

Senator NELSON. The previous testimony corresponds with your statement.

Mr. CONNICK. Well, there was a funny thing about this estimate. This estimate was not vital to the job. The estimates are generally vital and of considerable importance, but you had to have the yards to get the ships, and you had to have the ships, and it was not an essential of the contract that you have an estimate.

Senator NELSON. It was not vital to you, but it was vital to the Government.

Mr. CONNICK. It was not vital to us nor to the Government, either. You had to have the ships, and you had to have the yard to get the

ships. It was the only way. You can not get ships, in our judgment——

Senator NELSON (interposing). And now, whether the yard cost $21,000,000 or $42,000,000, cut little figure with you, but it cut a great figure with the Government.

Mr. CONNICK. It cut a great figure with us also, because we built that yard for nothing; we designed that yard; we furnished all of our experts to put that yard through; we furnished the services on that yard just the same as an attorney does for his client; and the longer we have to work doing it the more painful it becomes.

Senator NELSON. Yes; I can sympathize with you. It must have been very painful. [Laughter.]

Mr. CONNICK. All right. [Laughter.] Well, it is. We certainly put a red flag on that estimate when we sent it down to the Government, and when we handed a copy to Admiral Capps we said, "Here it is. You know estimates, and it is not worth the paper it is written on. It calls for $21,000,000.

(The estimate submitted by Mr. Connick is here printed in full:)

PRELIMINARY MEMORANDUM OF THE PROBABLE COST OF A SHIP-ASSEMBLING PLANT AT HOG ISLAND.

Shipways	$8,175,000
Wet basins and outfitting wharf	2,750,000
Transportation facilities	2,150,000
General utilities	2,015,000
Floating equipment	1,730,000
General buildings, including equipment	1,550,000
Construction incident to building of ways and docks	250,000
Engineering	500,000
Office at works, etc	200,000
Insurance and damages	250,000
Contingencies	1,430,000
Total	21,000,000

Senator NELSON. You added $2,000,000 to it.

Mr. CONNICK. I added $2,000,000 to it. It called for $21,000,000. I just scattered that money over the various items.

Senator NELSON. And you think you did not add enough?

Mr. CONNICK. Well, when we get the yard completely built we will find out whether I added enough or not, because the yard we are building is not the yard we estimated on. Let me show you that plan. You understand plans. [Mr. Connick here exhibited drawing to the committee.] There are those 50 ways crowded together down there [indicating on plan]. That is the cheapest way to build them, crowded up, but we found that we could save money in building the ships if we spread them apart and gave more room for the men to work. This is the yard [indicating] we are building. It will cost more for the yard, but it produces ships for less money. You can see the difference right off.

Senator NELSON. Those [indicating] are the ways?

Mr. CONNICK. Those are the ways. Here is this little bit of a railroad track.

Senator NELSON. What portion of the ways have you completed?

Mr. CONNICK. I will show you a diagram in a few minutes that will tell you exactly.

Senator NELSON. Can you not point out what happened on that?

Mr. CONNICK. All the subcontracts are let.
Senator NELSON. I do not care about the subcontracts. I want to ıow what ways have been completed.
Mr. CONNICK. Twelve ways are ready for the steel.
Senator NELSON. Which 12 are they?
Mr. CONNICK. I can not point them out here. Wait a minute. I ill get it for you. I can show you better on another plan.
Senator NELSON. They are in one bunch, are they not?
Mr. CONNICK. There is the way the ways look. There is a little ap on this thing [referring to another plan] that shows the amount : work done on each way, that red portion. You can lay the steel ı a way when it is about down to there [indicating]. We have ıout, I would say, 12 ways ready for steel, and we have got the steel ır one way, and I think there is steel for two ways coming in or in ıe vicinity; something like that.
For instance, our original estimate calls for, or it tells you in some ɜtail—I will just read you a few of the things. It is just like at ɜst you will decide to build a house with 10 rooms and then finish ɔ with a hotel 10 stories high. It is not the same thing. This ıing called for cableways. Cableways are all right to build ships, ıt we found out by spending more money and putting in derrick ıops that we would have to spend more money on the shops but we ɔuld take the money and put it into the shop and save on the con-ruction of the ships. Everything we did in connection with the ɜvelopment of this plant and getting from here [indicating one lan] to here [indicating another plan] we did right in conjunction ith the Government representatives. Here is what we do from ıe day we signed the contract: They signed every plan that was ade and they studied right along with us and reached the same con-ısion. Instead of housing 5,000 laborers, we housed about 7,000 en. Instead of 60,000 piles, we got about 115,000, or something ɜe that.
Senator NELSON. That you have driven now?
Mr. CONNICK. That we have to drive to get the work through. ıstead of putting in 60,000,000 feet of lumber, we have now got 5,000,000 feet either on the ground or in place now, and every-ing else is in a corresponding ratio. The yard we are building is ıt the $21,000,000 yard, or anything like that. It is an entirely fferent project. We got this extra type of ship in there. We had lengthen the ways, and that was not contemplated originally. It st a lot of money.
The CHAIRMAN. When were those changes made?
Mr. CONNICK. Right after the contract was signed; when we were lled upon to build those larger ships it was put up to us. We cognized the need of that ship. The Fleet Corporation was sound. There is another thing I want to clean up. It looks as though the eet Corporation delayed on this thing. They did not. This is e biggest contract ever made, and we found Admiral Capps an cellent gentleman, with a great amount of technical knowledge and lot of ability, cautious, and realizing fully that this contract was be the basis of a lot of other contracts and had to be carefully awn, he worked himself personally on the thing with our men, and ev straightened out everything the best they could, and that is the sis.

Senator NELSON. You just stated this change was made after the contract was signed. What was the contract? That was for 7,500-ton ships?

Mr. CONNICK. Yes, sir.

Senator NELSON. And for how many?

Mr. CONNICK. Fifty.

Senator NELSON. That was the original contract?

Mr. CONNICK. Yes; it had a clause in it, you know, to be expanded to 150—150 and 70. These 70 ships were the bigger ships and were equivalent to about 100 of the smaller ones. Here are some maps that may be of considerable interest. [Mr. Connick here exhibited certain maps to the committee.] This [indicating] shows Hog Island superimposed upon New York and this one superimposed upon Washington. It enables you to visualize just what that area looks like. It covers a good big portion of those cities.

As I said before, this original estimate was for 60,000,000 feet of lumber and now we have somewhere around 120,000,000; we have twice as many piles; instead of 25 miles of railroad we have 60 miles. We are putting in 23 miles of sewer. We have 100 miles of underground conduit in this thing. We have got enough insulated wire cable in there to reach from Portland, Me., to Richmond, Va., if stretched out.

Senator NELSON. Have you more than one steam railroad?

Mr. CONNICK. We have two lines of railroad in there. We have double-track lines of railroad.

Senator NELSON. It is all controlled by the Pennsylvania Railroad, is it not?

Mr. CONNICK. Yes; but there is a connection——

Senator HARDING (interposing). I see by the papers the Reading has put a line to Hog Island.

Mr. CONNICK. There is a connection being put in, and by the time we get going in good shape it will be in there.

Another thing, that estimate of $21,000,000 was based upon summer work, to do the thing in about eight months, and the bulk of it to be done in the summer and stretched out some through the winter. Instead of that, we have had to get the ways all ready in the wintertime, and, as you know, this has been the severest winter weather we have ever had. I have a diagram here which shows just what happened and how much below normal the thermometer has been. There has only been a little while since the 1st of December, well up into the middle of February when the weather has been above freezing. The result is that the frost has gone down very deep. And just let me explain how that increases the cost. Take the grading operation. A steam shovel will just scoop up sand at the cost of a matter of a few cents a yard and dump it into the cars as fast as you can get the cars up to it. But when that ground was frozen 3 feet deep you had to blast it just like it had been granite. Frozen ground does not blast well, because the blast just throws it out actually like it was clay; and that work costs, instead of cents per yard, several times as much. You can not compare it, but we know very well it is up in the dollar column.

Senator NELSON. Did it freeze as much as 3 feet deep?

Mr. CONNICK. We had 30 inches where I measured it.

Senator NELSON. That is almost as bad as Minnesota.

Mr. CONNICK. Ordinarily there, it only gets a few inches deep, but is year it got down 30 inches.

Again, we have put in that sewer system under great difficulty. e had to build a railroad track to get the stuff in and ballast the ack, and these cinders would freeze solid. In the summer time all u have to do is just pull a handle and unload the car, and now you ve got to stick the car full of steam pipes and warm it up, and it sts dollars a yard to get it out. If you want the ships, you have got get it out. We could not delay the construction of those sewers. was talked over and given full consideration, and in the summer ne we knew we would have about 30,000 of men down there, and had to be prepared to preserve the health of those men, and it uld be done by the use of sanitary sewers. We had to build those wers in frozen ground. We did some of the sewer work as soon as got the contract in the fall, and we have during the winter had to k that frozen ground with a pick, which ordinarily we would have t out with a bucket, and it would have come out just as fast as the cket would grab hold of it and pull it out.

Senator NELSON. What is the character of that soil?

Mr. CONNICK. It is very fine fill and gravel, and when frozen it the nearest thing to hard rock you ever saw, and a man can not k out 2 yards a day, and when a man gets in the ditch with a pick has got to work in the frozen ground, and he goes down and rks as long as he can and then he comes out of the trench—and ere is a place where the human body refuses to function—and he s to get next to the fire, and then he goes back to work again. Some ople call that inefficiency, but the man doing such work calls it triotism. He warms up and then he goes back and works, and the xt day he does it, and probably the next day after that he is worn t, and he does not come down to the job. That means a big labor rnover. You have to have another man to take that man's place, d you have to train him. I do not believe you can get one single borer to pick like that day after day. At any rate, you can not get large group of laborers to do that. You might find a few men who d the great strength to do it. But they get too cold. I have lked around the plant when I had from time to time to back up ainst the fire myself. I would not have done the kind of work they re doing.

Another thing, we had to lay the fire-protection pipes. We got all ids of stories about the German spies burning the yard up. And ere was something in those stories, because in our administration ilding when we got it up, newspapers were found wrapped around smokestack, and as soon as we built a fire the result would have en that, if we had not been very careful, it might have burned down d done thousands of dollars worth of damage. We need water for men this summer. We have to have water to carry on the operans of the yard, and we need water to protect that plant against e. There is millions of dollars worth of property there, and, for ample, that pine lumber would burn quite rapidly. We had to t the pipes in the ground. We had to back fill after we had laid the pipes, because, if we had put the water in before covering it , they would have frozen and burst. Let me show you how that

back filling has increased the cost. You have seen them scraping it into the ditch just as fast as a horse could walk down the street. You can not scrape frozen ground, however. You can not blast it, because it goes everywhere on top of the surface, and, accordingly, you have got to pick it. Those men stood up there and picked that ground and shoveled it back in, and a man can not put back very much more than 2 or 3 yards a day, and I suppose he could scrape in hundreds of yards with an old horse. That is not inefficiency; that is something just beyond the control of the Shipping Board or ourselves or anybody. It had to be done.

Our pole lines had to be constructed, and we dug holes and blasted for pole lines.

And when it came to driving piles, it was simply terrible the conditions that you had to go through. You have to get a lot of steam up in the boiler and then get a hose and thaw a hole straight down in the ground through this frost and then put in a stick of dynamite. It takes time to get them there, and then you have to drive them like it was through rock. However, the pile driving was not as high in cost as some of the figures I saw presented where they figured in all the equipment along with the piles, and if they had followed that method of calculation with respect to the first pile, that first pile would have cost I do not know how many thousands of dollars; but the last pile would have shown a much lower cost. It is hardly a fair and just way to apportion the cost.

Senator NELSON. Well they get rent for those pile drivers, do they not?

Mr. CONNICK. Yes; they get rent for them.

The CHAIRMAN. Those are subcontracts.

Mr. CONNICK. Those are subcontracts; yes.

Senator NELSON. They have a lot of that material rented and doing nothing for which they are paying rent at the same time.

Mr. CONNICK. Those appliances we have got there have been used just as fast as we can get the material up to them. There has been some trouble in the arrival of material. I am glad you asked me that, because I had forgotten all about it. A great deal of this material comes from far-off points, and it is loaded on trains and gets tied up, and there has been transportation congestion all along the line, and the material does not come in regularly. The piles come in mixed, and sometimes we can not get a supply for the pile drivers, and there have been occasions when the pile drivers have not worked at full efficiency.

Senator NELSON. I want to ask you further in regard to the pile drivers: Is it not a fact that some of those pile drivers were repaired and fixed up by the Government since they came there and practically renewed?

Mr. CONNICK. I do not know about that.

Senator NELSON. Have they not put the cards on those pile drivers after they have been fixed up at Government expense and made them look as though they belonged to the subcontractor, and then charged the Government for them? Have they not brought in old pile drivers and repaired them at Government expense and then rented them to the Government and in that way the Government paid the rent for them?

Mr. CONNICK. I do not think that the Shipping Board would let ose people put over anything at all that was unfair to the Govern-ent.

Senator NELSON. I thought your company had been looking after it.

Mr. CONNICK. We have been looking after it, and the man who s the details of this——

Senator NELSON. Have you not been supervising the work?

Mr. CONNICK. No; I have not been supervising the work.

Senator NELSON. You have not been down there?

Mr. CONNICK. I am on the job. I am representing the American ternational on this thing to see that these fellows on the job do at work and deliver the goods.

Senator NELSON. Oh, well, you do not know anything about it?

Mr. CONNICK. I do not know about the details. It is impossible r me to know that. I am on top of the job. But the president of e American International Shipbuilding Corporation, knows out the details of the yard, and that will be known by the man who s charge of the construction of the yard.

Senator NELSON. And before Admiral Bowles came up there, was t the management in the hands of your corporation?

Mr. CONNICK. The same situation exists now. Admiral Bowles me up there representing the Shipping Board and just coordinated e Shipping Board's activities up there.

Senator NELSON. Who runs it, then; who manages the labor force?

Mr. CONNICK. We manage the labor force.

Senator NELSON. That is what I mean. It was under your man-ement but not the Shipbuilding Corporation, and the subcontrac-rs, were they not under your supervision?

Mr. CONNICK. They are under our supervision, but it is initiated d worked out jointly with the Shipping Board.

Senator NELSON. And the subcontractors were allowed a commis-n?

Mr. CONNICK. They had to have something for doing the work, cause if they were not working there they could be working some ace else and getting a little money for it. They do not get very ich. Take this Raymond Concrete Pile Co. I know one ship-ilder who wanted them to build on 10 per cent, but we got them in ere and got them down to 5 per cent. That is not inefficiency.

Senator NELSON. You rented the pile drivers and gave them a ren-l for them?

Mr. CONNICK. So would the other shipbuilder have done that on at cost plus the percentage.

Senator NELSON. They took the pile drivers and put their name on em and get rent for them?

Mr. CONNICK. You get a pile driver and put your name on it just e you see at construction jobs, the name of the Thompson & Star-t Co., or something else, on the side of the building.

Senator NELSON. The peculiar thing about it is that after the pile ivers were built at Government expense these contractors put their mes on them and then charged the Government rent for them.

Mr. CONNICK. I am not sure of that.

Senator NELSON. You do not want to say it is not so?

Mr. CONNICK. I do not know about it, and I will not tell you ything I do not know about.

Senator BANKHEAD. I can see how it is very natural that you do not know those details.

Mr. CONNICK. I can find out about it and write you a letter on it, and I will be glad to do that.

Senator NELSON. I think I know about it myself already, but I wanted to see if you knew about it.

Mr. CONNICK. Mr. Robinson will be here. Mr. Robinson is the man on top of that. He will tell you all about the details. I do not pretend to know the details.

Senator NELSON. Is Mr. Robinson the man who has commanded the labor force and had charge of it?

Mr. CONNICK. Mr. Robinson is the man on top of the job, and underneath Mr. Robinson is Mr. Goodenough, and under Mr. Goodenough is Mr. Muhlfeld. Mr. Robinson is one of the best, if not the very best, construction engineers in the country, and he is not on the pay roll of the Government, but we hired him as the prima donna engineer of the plant.

Senator NELSON. The question is, How is he running it?

Mr. CONNICK. All right. I went down there to look over this thing to see what was the matter, and I spent day after day going over the yards and the construction, and I tell you these fellows have done a big job, and it is a good job. This is the biggest construction thing that has ever been put over any place, and it is something that makes the Suez Canal and the Panama Canal look very small. There has never been anything like this done in such a hard winter. They say the laborers have been slackers. I think the laborers up there are patriots.

Senator NELSON. I think, according to your statement, the next patent-medicine almanacs which come out will contain Hog Island as among the remarkable things in the world.

Mr. CONNICK. You certainly will find it there right up along with the Panama Canal. There is one unfortunate thing. You remember the press came out with the statement to the effect that people working in the shipyards were going to be exempted from the draft, and, of course, that brought a lot of people to Hog Island who preferred to work in the trenches of Hog Island instead of the trenches of Europe. They would come in there, and when you have to hire a thousand men a day to get this work going—the material is there, and you have got to use it up—but they worked themselves out of a job pretty quickly.

Senator NELSON. Have you had any trouble to get plenty of help?

Mr. CONNICK. We can get all the help we want. Even as hard as that work is and as severe as the conditions are down there, we can get all the men we want.

Senator NELSON. You have had no trouble to get men enough.

Mr. CONNICK. Oh, no; you can get all the men you want. You can get everybody you want to build this work. You must go about it and build it, and if the materials will continue to come the way they have been—it has not been coming ideal, because that is impossible—and if the labor will function as well as it has I have no fear for this contract, not at all.

Senator NELSON. Have you had any trouble about getting material?

Mr. CONNICK. We have had this trouble: Material gets mixed up on the way, and sometimes we get the roof of the building before we

get the foundations. That is the trouble you have always to contend with in construction work. When I was building the San Francisco Exposition the same thing happened, and I got the roof before the piles to put the buildings on. We had a storm at sea, and we would not get any material for seven days, and then in one day we would get seven loads.

As to how far along this work is, I want to give you an idea on that. About half the grading has been completed—3[illegible] cubic yards. The dredging is pretty well under way—3[illegible] cubic yards of dredging. We had those dredges frozen up solid during the winter.

Senator NELSON. Those dredges belong to the contractor?

Mr. CONNICK. They belong to the contractors.

Senator NELSON. We pay rent for them?

Mr. CONNICK. Yes, sir; and if you were buying them these times they would be found very expensive. Dredges are very expensive nowadays. That little map shows you the condition of that yard. Those buildings colored red show that they are well under way. The railroad tracks are well under way.

Senator NELSON. Where is the water front?

Mr. CONNICK. Right in here. [Indicating.]

Senator NELSON. And this is the yard?

Mr. CONNICK. Those are the ways, and those [indicating] are the railroad tracks.

Senator NELSON. And what are these?

Mr. CONNICK. Those are the office buildings.

Senator NELSON. And these [indicating]?

Mr. CONNICK. Those are shops, and those [indicating] are houses for laborers.

Senator NELSON. These are houses for laborers?

Mr. CONNICK. Yes.

Senator NELSON. How many do you have?

Mr. CONNICK. About 7,000.

Senator NELSON. And how many have you employed?

Mr. CONNICK. We have had about 24,000 men on that job some days. I am just speaking now in general terms. I would say we are now running around 20,000.

Senator NELSON. Are you working more than one shift?

Mr. CONNICK. Some things we work more than one shift on. It depends on whether it is necessary or not. Some things we work on Sunday. We talked it over with Admiral Bowles, who is the representative of the Government, and finally decided what we need to do about it.

They are doing a wonderful work, those men are. Their activities are coordinated. They have men there now who know one another and who know our men, and the whole thing is working along in one style.

Take the ships. You may be interested in knowing where the ships are. We have been talking about the yard, and what we are going to get out of that yard is the ships. I have had these diagrams [exhibiting diagrams to committee] prepared because they show you in graphic style, and it is always easier to understand them. There are your 25 ships [indicating]. That shows material has been or-

dered and manufactured and shipped from the mill. Here [indicating] is the material that has been fabricated out of the fabricating shops, and here [indicating] is material shipped to Hog Island and on the way. That is the first 25 ships.

Your second 25 A ships are in that shape. In other words, you get a picture of all those 7,500-ton ships from those two diagrams. Of course, the B ships follow behind. There are the first B ships.

Senator NELSON. Those are the bigger ships?

Mr. CONNICK. Those are the bigger ships; yes.

Senator NELSON. Those are fine pictures; but now tell me what ships are you going to get ready?

Mr. CONNICK. We are going to get 25 of the A ships.

Senator NELSON. When?

Mr. CONNICK. We are going to get 50 ships this year.

Senator NELSON. When will we get the first ships?

Mr. CONNICK. I will tell you in a second.

Senator NELSON. How soon will we get any on the water, so we can use them?

Mr. CONNICK. You will get—but let me get another diagram out here. [Referring to another diagram.] You are going to get 25 A ships the end of October, or, say, the 1st of November.

Senator NELSON. Those are the first we will get?

Mr. CONNICK. Those are the first you will get.

Senator NELSON. And that will not be until next October?

Mr. CONNICK. That will be next October. You get your 25 B ships in the middle of December. We have to build the yard and then build the ships.

Senator NELSON. It will be over seven months before we can get any of those ships?

Mr. CONNICK. Yes, sir; I would say up to that date.

Senator NELSON. And then we may get as many as 25?

Mr. CONNICK. You will get 50.

Senator NELSON. Within seven months?

Mr. CONNICK. I will count them up. [After making calculation.] It is going to be about eight months before you get your first 25 ships, and it is going to be about nine and one-half months before you get your next 25 ships.

Senator NELSON. We can not get them by October?

Mr. CONNICK. The end of October or 1st of November, on the date the contract requires them to be delivered to you. And, let me tell you, that is about as many ships as all the shipyards in the United States turned out before this thing occurred. We are just duplicating the capacity of the entire United States. Fifty ships of this size are more than ever turned out before in the United States.

Senator NELSON. Fifty ships in eight months?

Mr. CONNICK. Fifty ships in a year.

Senator NELSON. I mean in eight months?

Mr. CONNICK. In eight months you are going to get about 27 or 28 ships, and then you are going to get the 50 ships in the next six weeks.

The CHAIRMAN. And after that?

Mr. CONNICK. And after that they come very fast. You are going to have 50 ships—that is, if the material and the labor functions as it has done before—by the 1st of April: you will have your 50 small

ips and your 70 big ships by the middle of July—that is, if we t the material and everything comes along the way it is supposed come. We see no reason now why it should not do so.

Senator NELSON. The main thing I am interested in—what are we ing to get soon—this year?

Mr. CONNICK. All you can expect are those 50 ships this year.

Senator NELSON. And we will not get any until next winter?

Mr. CONNICK. That is right; you will not get any until next win- r; no, sir; not one.

Senator HARDING. We are not getting many this year at all except mmandeered ships that have been completed?

Mr. CONNICK. I do not know what the Shipping Board is doing at her yards.

Senator NELSON. Not over 10 outside of the commandeered ships.

Senator HARDING. That is what I say—all of our ships put into rvice will be the requisitioned ships.

Senator NELSON. Requisitioned ships, English and Norwegian ips, which are built here in the yards, the biggest share being Eng- sh ships.

Mr. CONNICK. In connection with this contract I want to say a ord. There are just three ways you can get those contracts. You n either bid a flat price for so many dollars per ship and you ke all the risks, and in these times that means that the contractor ould have to bid high enough to protect himself against a lot of certain elements; or you can take a straight cost-plus contract; or u can do it this way——

Senator NELSON. This is my idea, Mr. Connick: According to your scription of the great organization you have and its capacity and fectiveness, I think it would have been much better if you had in- sted your own capital and run this work and charged the Gov- nment enough for the ships. I think there would have been more ficiency on your part under those conditions, and you would have en more economical with your money than where you had simply e Government's money to spend.

Mr. CONNICK. That is interesting, and that brings up a very in- resting point. I have had a lot of experience with contractors, and have found out—at least my experience has been—that when you ntract with a man to do a thing for a fixed sum which includes ofit and all his expenses that there is a sort of an inherent tendency skim the job and do it slow because that is generally the economical ay to do it. On that basis a contractor would never have worked is winter. He would have plodded along and figured out whether was going to make more money this winter by going slow. Again, might go broke. This labor situation is complicated. Materials e going up, and you can not tell where you are going to come out.

Senator NELSON. I was told the other day, in reference to the labor estion, that some would work on Sunday and get double pay, and en they would keep Monday—that is, would not work Monday— cause they would make that their Sabbath, but would work on nday and get double pay for it. Do they give them double pay r working holidays or Sundays?

Mr. CONNICK. I have to admit that there are men in this country ho only seem to want to accumulate so much money a week, and ter they get that much they become rather uninterested in the job,

and if they can get in a little double time it merely shortens their time on the job and it increases their time in which to loaf. But you can not recognize those men when you have on your rolls 20,000 men. You will get some of those kind of fellows. You can not get 20,000 patriots together by looking at their hands.

Senator NELSON. I recognize that a good many of them possessed the original sins.

Mr. CONNICK. But by and large I am for the laborers on this job. I do not think they are slackers, not by a long ways. We had some button-hole workers down there after that draft news got in the press. We had all kinds of people come down there, undersized, and they just had a sort of feeling, you know, that these trenches at Hog Island, frozen though they were, might have been rather more attractive than the trenches of Europe.

Senator NELSON. What became of those people?

Mr. CONNICK. We just had a roving gang of men fire them, a bunch of men going around the works driving them out. You can not tell how effective a man is on a pick until he gets on the working end of it. So, we just had a bunch of experienced foremen, who came from Stone & Webster, go over the ground and fire those fellows out as they found them shirking.

Senator NELSON. The most of your workmen, you say, are patriotic and willing to work and do the best they can?

Mr. CONNICK. I think by and large there is a fine group of men up there. They are doing the best they can. We have had men circulating around among the force, and we find out what those men think. We find those men are patriotic. There is an unfortunate condition exists here, and that is an economic condition, that the demand for labor exceeds the supply; that is, a man can leave a job and go get another one by walking to it. There is a man out at the gate to welcome him, and that man will take a speculative chance on him just by sizing him up. But you can not tell whether they are any good until you try them. You have to try them in order to find out whether they will work good with a pick, shovel, or on the pile driver.

There was one condition that was made difficult on account of the way the railway trains come in there. I went down in the yard one day, and I saw just a host of men unloading lumber out of three or four box cars, and I could not understand why it was, and I commenced to analyze the situation. Remember, they unload as many as 200 carloads a day. A train would come in and set a carload of piles. That would be a mixed train; and they put men to unloading the piles. Up the road would be another train, and right behind that train would be another one, and every few minutes a train would be coming in. They unloaded the piles first, just pulling the stakes and pushing the piles off the cars, and then the men who had unloaded the piles concentrated on the next car, and finally they got to the box cars which were loaded with lumber, which was the slowest material to handle, and every man wanted to be doing something, and they were in one another's way. You would find four men under one small plank. They thought if they did not keep working the boss would fire them. They knew these men we had going around were firing men. But you can not fire men under the conditions I have just described, because you would reduce that gang, and you

had to hold them for unloading the next train. What could you do, Senator? You simply had to do the best you could. That is not inefficiency; that is just simply one of the conditions that you strike on every construction job. Out at the exposition we had a storm, and I expected a ship to come in every day. We did not get any for a while, and I went down one day and found seven had come in, and I had equipment for about three, and I had difficulties. I had to tie those ships up and pay demurrage on them. Then, again, I would get them in down there and expect the ships to come in, and they would not come. I could not gamble on the elements—I could not guess them right—and you can not guess them right up here.

In regard to this organization: There is not another organization that I know of fitted to do this work. Here is this great American International organization. Its principal activities since it was formed has been the promotion of trade by foreign nations. It is headed by captains of industry: every man is second to none in his record of achievement. They have a great number of efficient men that they have employed scattered around in connection with their operations. What are they doing? Until the Russian situation became too acute, they had offices in Petrograd, London, Paris, Rome, Mexico City. They sent commissions and agents and business men to South America to promote trade.

Senator NELSON. They were engaged in building railroads and other things, but not ships.

Mr. CONNICK. They were engaged in shipbuilding. I am coming to that a little later. They were negotiating contracts for a thousand miles of railroad in China. They were practically rebuilding, you might say, the Grand Canal in China. They had acquired the Pacific Mail. They put the American flag back on the Pacific. Then they bought the New York Shipbuilding Corporation to provide ships for their shipping interests, and they were closely connected with Stone & Webster.

And who are Stone & Webster? They have been a great factor in this matter. They have been building all the time on this same type of contract, the cost-plus contract. And that is the best contract you can make, because you can fire a man off the job any time you want to. The only connection between the contractor and the owner is the efficiency of the contractor. Any time the owner thinks the contractor is not efficient he can put him off the job.

Senator NELSON. You can not quite say that those contracts are the same as in this case, because the men they have been building ships for have not built the yards for them.

Mr. CONNICK. I am going to take that up a little later. My attention is called to the fact that that is being done. You are not only building shipyards and paying for the shipyards and then paying for the ships, but you are also building powder plants and letting other people operate the powder plants.

Senator NELSON. Yes: we are building nitrate plants, too.

Mr. CONNICK. The Stone & Webster organization has built thousands of buildings. They have selected their men and created this wonderful engineering force. Take this man Robinson. That fellow Robinson has got the finest kind of engineering education—

Harvard and Boston Tech. Then he started out working for Stone & Webster——

Senator NELSON. Is he their hydraulic engineer?

Mr. CONNICK. Engineering manager. He started in at $4 or $5 a week, and has worked his way up.

Senator NELSON. Is he the water-power man?

Mr. CONNICK. One of them; yes. He has worked his way up until he now is a partner. He is the man who has supervised this job. He has supervised hundreds of power installations in this country. I will not say "hundreds," no; that may be putting it a little too high, but for 25 years he has been putting in these power installations.

Take this man Goodenough. He is a technically educated man. After he got through with his technical education he went to work in a shipyard as a draftsman. Then he went to sea on the Lakes, to see how these contraptions that he had designed would work. Then he went to Sparrows Point and became chief draftsman. After working there for several years he went to sea on the North Atlantic, right where these ships are going, in order to get a practical knowledge of the operation of ships. Then he became impressed with the possibilities of electric power, and went with Stone & Webster, and in cooperation with this man Robinson he built these power stations, and he is the man we have got at the head of our shipbuilding department.

Take this man Muhlfeld; his record is almost the same. He started work as a draftsman, and became foreman for a contractor putting up steel-frame buildings. Stone & Webster got hold of him, and he is building this yard. We would like to have him come down here. We would like to have you see him. You can tell more from looking at a man whether he is any good.

Then take this New York Shipbuilding Corporation. That company was 17 years in existence. They have built battleships, cruisers, torpedo boats, tankers—they have built 200 ships there, and, by the way, they were 17 years building those 200 ships. That gives an idea of the difference between the usual way of building ships and this fabricating system.

There we were. Here were Stone & Webster as one arm of this system; the other arm the New York Ship, with its technical ability. Stone & Webster had 40,000 men working for them at a time, and with those 40,000 men they had straw bosses, foremen, draftsmen, engineers, architects, surveyors, and all of the head men that go with that kind of an organization. The New York Ship was the same way. Behind the whole thing was this group of successful men in New York coordinating the whole thing. It was an ideal arrangement; it can not be found anywhere else; I do not know where you can find it.

Now, they have taken over this work. What do they bring to the work? They had a working organization and started work the day after the contract was signed. Suppose they had waited a month. Could the Government have done it in a month? They could not have done it in a year. And as a result that yard is worth to you $9,000,000 a month because of the time that has been saved.

Senator NELSON. Are not a good many of these men whom you have taken into this great organization that you plume yourself so

much on and whom the Government is paying, men that you have recently taken from the country in other trades and given these enormous salaries?

Mr. CONNICK. No, sir; the top men in this organization are men who have been working with Stone & Webster for years.

Senator NELSON. What do you say about the two Harrisses from Minneapolis?

Mr. CONNICK. I do not know who the two Harrisses from Minneapolis are.

Senator NELSON. Then you do not know everything about the yard?

Mr. CONNICK. I do not know everything; I do not go clear down to foremen and draftsmen.

Senator NELSON. What about Mr. Gillette?

Mr. CONNICK. Mr. Gillette is an extremely able man. He is the man that is getting this steel together, and any sum that you pay Mr. Gillette to do that is all right, because he is delivering the goods. And if he should fall down, or if the man who holds that job should fall down and delay this work one day it would cost you $300,000.

Senator NELSON. Our experience is that big salaries do not always protect the Government.

Mr. CONNICK. Our experience is that in order to get able men you have got to pay them, and we are taking the highest priced men and paying them out of our own pockets.

Senator NELSON. But how do you account for the fact that, having saddled part of your force on the Government, they are getting more pay now than they were under you?

Mr. CONNICK. That is a very pertinent question. Here we are building a shipyard, and when the contract is finished it is going to be like a circus; it is going to close down and leave town, and no one knows what will become of it after that. Then these men will have to hustle and get a job. They have brought on their families to live there. In this engineering business you have generally got to raise those men the first of every year; if you do not do that somebody else takes them from you. They have had to find places to live, or they have had to live in objectionable places or leave their families. A man has a right to enjoy happiness and get something out of life. Those men have given up things to come here, and I think those salaries are all right, what I have seen of them. Furthermore, that question has been discussed in great detail with the Shipping Board, and they seem to feel the same way. It seems to me, from my contact with the Shipping Board, that they are protecting the Government.

Senator NELSON. Of course you understand that we are all creatures of our environment, and we who live back in the country and pay the taxes——

Mr. CONNICK. That is where I come from, back in the country.

Senator NELSON. We who are paying the taxes and who furnish the men to fight this war do not get any such money through doing the hard drudgery of life. Those people do not get any such salaries as you say these men are getting. These men here seem to be in a sort of feudal castle, and get these enormous salaries just because they have gradually worked up. Now, to us people back in the country who have to pay the taxes and bear the brunt of the whole thing

these things seem very burdensome. You do not seem to realize it——

Mr. CONNICK. I realize it fully.

Senator NELSON. You seem to account for it by the fact that these men must get big salaries. You seem to think that all there is of life is to get a good salary and a big name.

Mr. CONNICK. No, Senator; there are other things in life. Besides getting a big salary it is nice to enjoy your family. Some of these men can not. Some of these men are working long hours. Their entire reputation is at stake in this job. They have got to come here and deliver the ships; if they do not they are ruined. When they get through with this job they do not know what will become of them.

Senator NELSON. Will you furnish a list of those men that are likely to have their reputations ruined?

Mr. CONNICK. We do not think there are any whose reputations will be ruined. If we thought there were any we would not have them there, so there is no list of them. You take a man that has 20,000 men under him; he ought to have a few cents for every man, in the nature of a salary, because he can save thousands of dollars a day in handling those men properly. How many men are there in the country to-day that can handle 20,000 men? There are very, very few.

Senator NELSON. There have not been any up at Hog Island.

Mr. CONNICK. I do not agree with you, Senator; those men have been handled.

Senator NELSON. The evidence shows there has been great waste there, and Admiral Bowles since he has taken charge has reduced some of that waste.

Mr. CONNICK. I am glad you brought up the word "waste"——

Senator NELSON. I can readily excuse you. I know how easy it is to be wasteful when you handle somebody else's property. It is a good deal like a hired girl in a family; she does not have to buy the provisions, and she does not care a continental about how she uses them. You get all your supplies from the Government, and, of course, you do not mind a little bit of waste as long as you have got these big high-priced men at the head of it.

Mr. CONNICK. I am glad you have brought up the question of waste. I have some figures here that I got the other day, showing the commitments that have been made on that job, and they amount to $29,000,000 to date. Out of that the only item in which there can be any waste is labor, which amounts to $7,000,000. There is no waste of material.

Senator NELSON. You have three publicity men there with monthly salaries amounting to about $2,000. Is it the custom to have such a force in these other shipyards? Was it the custom of Stone & Webster and the New York Shipbuilding Co.?

Mr. CONNICK. All these big concerns have publicity men. They may be misnamed; they are really welfare men. They are in charge of getting the laborers and taking care of them after they get there. Now, they have been thrown off the job, and we will try it a while without them. Stone & Webster have publicity men. The Pacific Gas & Electric Co. have them. Almost every big and successful corporation takes care of its men. They may call those employees

icity men, labor agents, or welfare men, but they have them in form or another or they do not run very long.
nator NELSON. What were these three men?
r. CONNICK. Publicity men, welfare men, labor agents——
nator NELSON. They were sort of Pooh-Bahs then in the shipling industry?
:. CONNICK. No; they were not Pooh-Bahs. They had several tions to perform, but Pooh-Bah had several more, as you will mber, according to Mr. Gilbert.
ıe CHAIRMAN. Now what is your idea, Mr. Connick, about her it would not have been better, instead of undertaking a task required the assembling of 25,000 men in one place, to have disted the work and divided this yard into three or four yards?
:. CONNICK. That was given very careful consideration. We d have found difficulty in getting the type of men to handle the ;, and then it would have resolved itself into training three or armies instead of one. It would also have involved the scatg of materials to these different yards. Furthermore, if we all that material in one yard the chances of running short of one thing are much less than if it were scattered in several s. That is an economic problem, and there are two schools of ght as to that. Some big manufacturing concerns maintain when they want to enlarge their works it is far better to go to ıer place and do it. Then again, there is the other fellow who "No; we have an organization here that is functioning all right, when we enlarge our works we will do it right here." We went the matter fully, and we decided the thing to do was to put all in one place. We put our best judgment on it, and that was esult.
nator NELSON. According to your statement, Mr. Connick, these ler yards are suffering because they have not got the top men your organization? That is their misfortune?
:. CONNICK. What other yards?
nator NELSON. All these other yards. This is going to be the est yard in the country, is it not?
:. CONNICK. The biggest in the world; the biggest that ever was.
nator NELSON. Yes. It may be the biggest up to the resurrection
L.
:. CONNICK. Possibly, and it is going to be the most successful.
nator NELSON. And these smaller yards are unfortunate because have not got these top men?
:. CONNICK. The formerly existing yards you can not compare this yard. They do not do the same thing. The existing s manufactured all the component parts of the ships and ıbled them on the ground. It is not like this proposition at all, it does not require the same kind of a man. You take the man arge in one of the existing yards where they have 4,000 or 5,000 ıp to 12,000 men and he is not this kind of man at all. Well, est way to find out about the salaries those men get is to learn rectly from them, because it is all hearsay with me. But I : if you were to make an investigation of the salaries of the top you would think these men were being discriminated against.
e CHAIRMAN. You were dealing with the question of waste. ıat item of $29,000,000, $7,000,000 was labor?

Mr. CONNICK. Yes. The only thing you can waste is labor. If there is any waste, it is in that $7,000,000, and I maintain there has not been a bit of waste. That labor came there and worked and you paid that labor for its speed. You did not waste any money; that is not waste. You paid for the speed and you have got this yard built through the winter in the same time you would have had it built during the summer.

The CHAIRMAN. If the men were on two or three pay rolls, or if they were idle and drawing pay, or if they were paid while they were traveling back and forth, that might be called waste?

Mr. CONNICK. That was one of the conditions of the job, Senator. There has been a very difficult transportation problem down there, but that is being worked out. We started this job in a hurry, and I want to show you some photographs showing how this island looked at one date and how it looked at another [exhibiting photographs]. There is a photograph of the island on September 20, and right on top of it here is another photograph, which shows the island November 27, two months afterwards. Here are photographs that show it to-day. There they are driving piles. Look at them steaming them out down there. That is not waste; that is one of the handicaps of winter weather. A man working there is a patriot.

Senator NELSON. We do not consider men patriots in my country if they work in the snow. [Laughter.]

Mr. CONNICK. Probably they have more snow there, but I say that a man that works under unusually cold conditions is patriotic.

Senator NELSON. When you take a boy 15 years old, with an ox team, driving a load of wheat to market at 30° below zero, then you can talk about patriotism. And yet we never think of such a thing.

Mr. CONNICK. But here at the present time they do not have to do it. They can go out and get pretty soft jobs around Philadelphia. They can get a job working in a shirt factory; that does not expose them to the cold. The men are doing the very best they can to put this through, and if the people will just get in and help us we might get along better. There is too much of that around this country—people finding fault with everything.

Senator NELSON. Understand one thing, we are in a different situation from you. We poor Senators, we who come from the country especially, feel it our duty to protect the Government as far as we can.

Mr. CONNICK. And so do we.

Senator NELSON. And with you it is just a question of big salaries and running your dipper into the Government bucket.

Mr. CONNICK. No; I do not agree with you at all, Senator. You are not treating me fairly.

Senator NELSON. We do not plume ourselves on our big wages. We all have help here; we have a good deal of work, but we do not think of paying them such enormous wages as you do.

Mr. CONNICK. And what do you get in addition to your wages? You get honor. You get the highest honor that can come to a man. What does a man get that is building a shipyard?

Senator NELSON. The reputation of being the biggest engineer in the country and getting a salary of $300,000 a year.

Mr. CONNICK. The biggest engineers in the country get more than at, but they get no honor like a Senator.
Senator NELSON. They get honor if they are straight.
Mr. CONNICK. The greatest honor that can come to a man in this untry is to be President of the United States. The next is to beme a United States Senator.
Senator NELSON. The highest honor that can come to a citizen of is country, Mr. Connick, is to treat the Government as he would at himself, and be honest.
Mr. CONNICK. And that is exactly what is being done here.
Senator NELSON. Whether it is an engineer, a Member of Congress, a Senator. The man who deals with the Government as he would al with himself, honestly, is the most honorable man of all, and does not require any title either, and you ought to know it.
Mr. CONNICK. If that is your definition of an honorable man, I ree with you for the sake of argument and will say that we have group of honorable men in this shipyard.
Senator NELSON. Well, take your ipse dixit for it. You measure by the great work they have done—how successful they have been, at fortunes they have accumulated, and call them captains of dustry, and therefore they are immune. That is your theory. ou want to look out what kind of gospel you are preaching to the merican people.
Mr. CONNICK. Well, every man has a right to his opinion.
Senator NELSON. Of course.
The CHAIRMAN. Go ahead, Mr. Connick.
Mr. CONNICK. I have taken up the general problems involved in is proposition.
The CHAIRMAN. You suggested that the situation there with reect to transportation was bad. You did have difficulty about that, d you not?
Mr. CONNICK. Yes. You take any undeveloped area like that, d the transportation follows the need. We could not find a deloped area anywhere, and I do not believe any such area exists here there are transportation facilities for 30,000 men. The railad companies are cooperating with us. The Shipping Board is operating with us. All the various interests in connection with is thing are doing the best they can to solve these problems. We derstood fully the difficulties of this situation when we went into and we recognized this also.
The CHAIRMAN. What I am getting at is not so much the general ea of cooperation, but what actually is being done. Is there a new e being built out there? Are the railroads being extended?
Mr. CONNICK. I have a memorandum here, and I will tell you st what is being done. Since the 1st of February two new trains ve been put in operation on the Philadelphia & Reading Railroad tween Philadelphia and Hog Island, and a new boat service from iladelphia to the island has been instituted for office employees. e number of men handled in this way has been increased up to out 9,500 or 10,000 a day.
Senator NELSON. Has the Reading a track of its own there?
Mr. CONNICK. A part of the way; they go in over other tracks. erybody is cooperating, and they just get in any old way they can. erything is being done that can be done.

Senator RANSDELL. Are you not assisting the street railway by building some cars for them?

Mr. CONNICK. The Fleet Corporation is assisting the street railway by building some cars for them, and they have under consideration a plan for building some tracks or for financing the building of tracks.

The CHAIRMAN. The road actually runs into the grounds, does it?

Mr. CONNICK. Yes, sir. Let me show you that [indicating on map previously introduced]: Here is this map of the island, and those roads come in right here.

The CHAIRMAN. Right between the ways and the buildings?

Mr. CONNICK. Yes. Here is where the men live; there are several thousand living there now.

The CHAIRMAN. Why does not the yard build more barracks there for the men?

Mr. CONNICK. Barracks are being built right here; they are practically all built now.

The CHAIRMAN. Is there room for building more barracks on the ground?

Mr. CONNICK. There is, yes; right around in here. But this area back in here [indicating] is going to be used as a dump for this dredging operation. We are going to dredge out this basin, and we have to have some place to put the dirt.

The CHAIRMAN. You have to dredge in front of the ways?

Mr. CONNICK. Some dredging has to be done in front of the ways also, but not very much, because there is deep water not very far out.

Senator RANSDELL. You are dredging here, where you expect to finish the ships?

Mr. CONNICK. Yes, sir.

Senator NELSON. That is where you put them after they are launched?

Mr. CONNICK. Yes; we will take them right in there, drop their engines in, and put the finishing touches on the ships and get them ready for sea.

Senator NELSON. Have they given you more power service on the electric lines?

Mr. CONNICK. They are improving the service, and they are extending the lines. It has not been done yet. There is consideration being given to a scheme to extend the line right down to the fence.

Senator NELSON. Where is the Shipping Board going to build houses? Do you know whether they have outlined any plan?

Mr. CONNICK. They have a plan under consideration right back here [indicating]. This plan they have under consideration. I do not know how far along it is.

Senator NELSON. Do you think they need more housing facilities?

Mr. CONNICK. There is no question about their needing more housing facilities. They need them and they need them bad and they need them quick.

Senator NELSON. Is it worth while then to build very expensive buildings if they need them quick?

Mr. CONNICK. That is a pretty hard question for me to answer. It depends upon what is going to happen to this yard. As I said before, when they get through with that yard nobody knows what

going to happen. It may be closed down just like a circus after ıe show is over.

Senator NELSON. We will have such a lot of money in it that I hope ıe yard will be controlled by the Government.

Mr. CONNICK. All you have got to do is to exercise your option.

Senator NELSON. If the plant is going to be as big as you state it , why should we not be able to dominate the shipbuilding industry fter the war is over as well as now?

Mr. CONNICK. With these plants that you have got you will not ıve much trouble.

Senator NELSON. And then the question will come up after the war over whether the Government should compete against these private ırds.

Mr. CONNICK. That is a problem for you Senators to solve.

Senator NELSON. So you see what we are up against.

Mr. CONNICK. I think you are well able to take care of that.

Senator RANSDELL. If this plant is going to be what you gentleıen all seem to think it will, will we not be able, through that and ne or two kindred plants, to dominate not only the shipbuilding of ıis country, but of other countries?

Mr. CONNICK. As far as the standard type of ship is concerned, I ıink there is no question about that. Of course, this is not exactly ıe right kind of plant to build passenger liners in, and you are mited in the size of your ships.

Senator RANSDELL. Will not this plant enable us to build very heaply, perhaps more cheaply than can be done elsewhere, the ordiary tramp ship of commerce—the freight carrier?

Mr. CONNICK. Absolutely; there is no question about that in my ıind.

The CHAIRMAN. Would it be possible for the Government to rent ne set of ways to one builder and another set of ways to another uilder, if it saw fit to lease them out, or would you have to operate he whole yard as one?

Mr. CONNICK. I think the results would be better if the yard were perated as a unit. I would have to study that question in order to ıve you a really intelligent answer. That is quite a large order.

Senator NELSON. You are familiar with the shipbuilding industry nd have given it consideration in a general way. Do you not think hat, after the war is over, by resorting to this system of shipbuilding nd standardizing, we will be able to compete with the shipbuilders f Europe?

Mr. CONNICK. Oh, I do not think there is any question about that.

Senator NELSON. We had great difficulty before the war, you know.)ur shipbuilding industry, outside of Government work, was almost othing.

Mr. CONNICK. I know that; yes.

Senator NELSON. And outside of the coasting trade?

Mr. CONNICK. Yes.

Senator NELSON. I have an idea—it is only a notion of mine—that nder this system of standardized ships and this method of building ve ought to be able to compete with Europe in shipbuilding after the war.

Mr. CONNICK. I have more than a notion along those same lines.

Senator NELSON. If we can do that, we will hold our country in front of the rest of the world as to merchant marine.

Mr. CONNICK. That will be the result.

Senator RANSDELL. Do you see any reason, sir, why with such a plant as this we could not compete on the most advantageous terms for the shipbuilding of the world, just as we have done in bridge building, for instance? I believe we sell bridges throughout the world.

Mr. CONNICK. Yes, sir.

Senator RANSDELL. I know we sell automobiles throughout the world, and our farm machinery is sold throughout the world, and our sewing machines, in competition with the best mechanics of other countries. Will not this put us on terms of parity or better than parity, in the same way that we have gone ahead with these other things?

Mr. CONNICK. That is my judgment in the matter; that is the way I feel about it. I think the thing that is being done here is perfectly wonderful. It is doing the same thing for ships that has been done for sewing machines, locomotives, standardized automobiles, watches, and things of that kind.

Senator NELSON. You are practically embarking on a system of fabricated vessels, standardized?

Mr. CONNICK. Yes, sir. And that is something everybody has not understood—the fact that they are both standardized and fabricated. It is not just the fabricated ship; it is the standardized fabricated ship.

Senator RANSDELL. That is the impression made on my mind—that we will absolutely compete and be ahead of everything in the world when we finish.

Mr. CONNICK. I would like to answer any questions that anybody wishes to ask. I want to make this just as clear as I can.

Senator NELSON. You have been very interesting, and I am sorry I had to interrupt you, but if there is anything else on your mind tell it to us. I am anxious to get all the light I can.

Mr. CONNICK. I do not know that I can say there is very much on my mind regarding shipbuilding and regarding this yard and these problems.

Senator NELSON. I want to say this to you, that everything I have said to you I want you to take in a Christian spirit.

Mr. CONNICK. Absolutely. [Laughter.] I think I have shown that I have. This is the only way we can find out these things, by sitting down and talking them over. We are all making a sincere, earnest effort to get at the truth, and I am perfectly willing to sit here and talk with you as long as necessary in order to clear the thing up, for the reason that we owe it, both you and I, to the American people to let them know just what is going on here. They want to know about it, and it is up to us to tell them, because we know.

Senator NELSON. Here is one thing I am anxious about. Is there any way by which you could speed up and give us some ships earlier than you have indicated?

Mr. CONNICK. We are thoroughly alive to the need for those ships. We are not making any promises. We are studying this thing just as hard as we can, and if we find anybody getting in the way we are going to come right down here and kick.

Senator NELSON. You know, if you can speed up and give us some ships within five or six months, that will cover a multitude of sins. [Laughter.]

Mr. CONNICK. Yes. But we are not going to tell you that we can build ships before the date that we feel sure we can give them to you.

Senator NELSON. I understand that, but I do hope you will speed up and give us ships, regardless of the time fixed in the contract, as soon as you possibly can. We need the ships.

Mr. CONNICK. We are fully alive to that. We are going to give you those ships just as quick as we possibly can get them ready. We know the ships are needed. We know what they are needed for. And I want to say this right now, that the whole thing is working well together. The Shipping Board and everybody are getting behind this thing, and everybody seems to be pushing. Once in a while, just as in a team of horses, some fellow gets his feet over the traces and little temperamental difficulties occur, but they are soon ironed out, and we start off again going full speed ahead.

Speed is the whole thing in this proposition. That is the reason I say there was no waste in this thing. We considered whether we would put those sewers in in winter, or save you a few hundred thousand dollars and put them in next spring. Every month of delay of this thing might be the deciding factor in this war. Fifteen of these ships might decide this war—getting troops over there and getting munitions to the troops. We are fully alive to the situation. We weigh every problem, and the representatives of the Shipping Board sit right in with us and give us the benefit of their experience. And they are all practical men, and a good many of those top men are those captains of industry that you have talked about this afternoon, and they have been successful too.

Senator NELSON. But you do not want to parade them before me. [Laughter.]

Mr. CONNICK. I can not help it once in a while.

Senator NELSON. I will say to you what I said to a couple of young men who came down from my State. They wanted me to help them get commissions in the Army. I found out they were subject to the draft, expected to be drafted, and I said, "Why do you not go and enlist, and you will not be drafted?" "Oh," they said, "we are bankers." They were running little country banks and they were fit for something better than that.

Mr. CONNICK. I will say this is a hard-working group of serious-minded men, trying to get these ships built and deliver them to the Government as quickly as possible. All we want you to do is to have confidence in us and help us along.

Senator NELSON. Now, you make speed and eliminate waste?

Mr. CONNICK. We will eliminate the waste as much as we can, but if it comes to a question of doing the thing at less money at a later date and doing it now and paying more money, we are going to put our shoulder to the wheel to make you do it now.

Senator NELSON. You understand, I do not call that waste where you were compelled to work in the winter.

Mr. CONNICK. I am glad to hear you say that.

Senator NELSON. That was not waste; you had to do it. In view of the fact that you had to work under those conditions, making it

more expensive, that was not waste. But there are a great many directions in which I think you are guilty of waste, but I will not go into that.

The CHAIRMAN. In other words, if you had just simply made a contract with the Government to build 50 ways at Hog Island and to take a reasonable time to do it in, so as to economize and save money, it would have been an entirely different proposition from doing it the way you are doing it?

Mr. CONNICK. Yes. If we went at it as they went at the Panama Canal or the Suez Canal it would take some years. This is not a commercial proposition. If it had been a commercial proposition we would not have driven a pile this winter; we would have been down there doing the least we could. As it was we had to get the piles down, and we had to pay for it. The pile drivers there sometimes could not get piles; the piles would be tied up down the road, or the United States Government wanted some of the piles sent to France, and they had to be sorted. Everybody was cooperating, but they could not work to full efficiency.

I want to call attention to that. Some of these pile-driver men have been known to do this: If they would get out to the driver and see only 10 or 12 piles in sight, and knew there was no train coming, they would make a conscientious effort to stretch those 10 or 12 piles over the 10 hours they were going to be on the job. But you can not altogether blame the men for that. I am for the man, for the laborer. That is what I did when I was a young fellow; I labored, and I know what it is.

The CHAIRMAN. If there are no other questions, I believe that is all, Mr. Connick.

Mr. CONNICK. That is all I have to say. We would really like very much to have you just get a little closer down to this job and talk with some of our detail men. Mr. Goodenough—this man who went to sea and has gone through this thing—I want you to see him, anyhow, to see the kind of men that are doing this work. You can tell by looking at a man whether he is any good or not. Look them over. See Mr. Robinson. See Mr. Muhlfeld. Let them explain to you some of the troubles they have had down here in the snow and ice and sleet.

The CHAIRMAN. I think we ought to have Mr. Robinson and Mr. Muhlfeld, anyway. They come a little closer to the details, do they not?

Mr. CONNICK. Yes, sir. But this Mr. Goodenough is a very important man. He is coordinating these jobs, and that is the thing you want to know about.

Senator NELSON. Who is marshaling the labor there?

Mr. CONNICK. Mr. Kennedy. You ought to see Mr. Kennedy. He is the man that has got the labor down there and——

Senator NELSON. Put them to work?

Mr. CONNICK. Turned them over to Mr. Goodenough to put them to work.

Senator NELSON. Who puts the men to work when they get there?

Mr. CONNICK. I should say, Mr. Muhlfeld.

The CHAIRMAN. I believe that is all, Mr. Connick. We are very much obliged to you.

(Thereupon, at 5.30 o'clock p. m., the committee adjourned to meet at 2 o'clock p. m. Tuesday, March 5, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

TUESDAY, MARCH 5, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., in the committee room, Capitol, Senator Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Nelson, Jones, Sherman, Harding, Fernald, and Johnson.

The CHAIRMAN. Gentlemen, we have the representatives of the American International Corporation here to-day, and I suggest that we hear them now.

Senator NELSON. Mr. Chairman, before we proceed with that, I would like to have the committee request the Emergency Fleet Corporation to furnish us with copies of all contracts made for fabricated material, and other material, for this Hog Island project; for fabricated material and other material used in the construction of this shipyard at Hog Island; whether contracted for directly by the Government or obtained through subcontracts from this corporation.

The CHAIRMAN. Contracts made by the American International Shipbuilding Corporation?

Senator NELSON. Yes; whether made by the American International Shipbuilding Corporation or by the Government.

The CHAIRMAN. Whether made by the American International Shipbuilding Corporation or the Emergency Fleet Corporation?

Senator NELSON. Or the Fleet Corporation; yes.

The CHAIRMAN. The committee will request that information. Mr. Baldwin, you have some witnesses whom you wish to present this afternoon, have you?

Mr. BALDWIN. Yes, Mr. Chairman. I wish first to present Mr. Robinson, the president of the American International Shipbuilding Corporation, the corporation that has supplied, not only what somebody has called the "know-how," but what we believe is the "do it." Mr. Robinson is familiar with the whole program all the way through.

The CHAIRMAN. Will you take the stand, Mr. Robinson, and state your name, age, and place of residence?

STATEMENT OF MR. DWIGHT PARKER ROBINSON, PRESIDENT AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, PHILADELPHIA, PA.

Mr. ROBINSON. My name is Dwight Parker Robinson; age, 4[illegible] years. I reside at Chestnut Hills, Mass., near Boston.

The CHAIRMAN. What has been your business heretofore?

Mr. ROBINSON. I was trained at Harvard University; I graduated there in 1890. Then I went to the Massachusetts Institute of Technology, and graduated there, as an electrical engineer, in 1892. I stayed there, at the request of the faculty, for a year, teaching mechanical engineering in the laboratory.

Then I went with Stone & Webster, who at that time were in their early years and occupied two or three rooms; I went there as a draftsman, and gradually worked out to outside work, going to Chicago; then building a power plant for Stone & Webster, in Nashville, Tenn., and staying there for two or three years and operating an electric-light company there. Then I went to Baltimore, Md., and from there I went to Seattle, Wash.

I was in Seattle for nearly four years, helping to develop properties here, constructing them and rebuilding them.

The CHAIRMAN. What properties were those?

Mr. ROBINSON. Electric light properties and street railways, and one thing and another.

Then I returned to the home office in Boston, to take charge of the engineering department. That was in 1903. Shortly after that we formed the Stone & Webster Engineering Corporation, for doing engineering and construction work. I became president of that. That was in, about, 1906. And I have had charge of the development of the engineering and construction end of Stone & Webster activities ever since. I have been a partner there for the last fi[illegible] years, and have had to do with the getting of business and the execution of business, and building up the organization for handling it.

Senator NELSON. What has been the main business that Stone & Webster have been doing all this time?

Mr. ROBINSON. In the early days, they started out as electric engineers and experts in doing engineering work; then they gradually worked into the development of electric lighting, street railwa[illegible] and hydraulic properties and that sort of thing.

Senator NELSON. What are called "public utilities"?

Mr. ROBINSON. Public utility work; yes, sir—spending their own money and their friends' money, and working into it from the engineering end, originally; they were doing the work in the way that was usual in those days.

Senator NELSON. In these later days, what have they been doing

Mr. ROBINSON. In these later days they have been managing a good many public utility properties; many millions of dollars worth of them.

Senator NELSON. They have had a number of Government contracts, have they not?

Mr. ROBINSON. We have had a number of Government contracts, yes, sir.

Senator NELSON. Could you enumerate those Government contracts that Stone & Webster have had?

Mr. ROBINSON. I can enumerate some of them.

Senator NELSON. Will you do so, please.

Mr. ROBINSON. We had a cantonment in San Antonio, Tex.

Senator NELSON. How much was involved in that?

Mr. ROBINSON. $6,500,000. We got through first, of all the cantonments, with the least total expenditure, and came out third on the per capita expenditure.

Senator NELSON. I was not asking about that; but just how much did you get out of that job, or how much did your firm get out of it?

Mr. ROBINSON. I do not remember just what we did net on that. The maximum fee on that was $250,000, as I remember it. I have not in mind the charges that we had out against that; I do not know what we netted out of that work.

Senator NELSON. What other Government contracts have you had—I mean in these later days?

Mr. ROBINSON. I understand that. Well, in the beginning, really the first Government work we did was in the early stages of the war, when the war first broke out. We wanted to be of use to the Government and to serve the Government in every way we could. We realized that we could do more for the Government as an organization than we could as scattered individuals, and with that idea in mind, before this country went into the war, we had had some negotiations with reference to some Government work out at Rock Island. We knew about it, and when the war broke out we made an offer to the Government to handle that work for the Government at cost to us.

Senator NELSON. Where was that work?

Mr. ROBINSON. It was constructing some buildings and shops at Rock Island Arsenal, at Rock Island, Ill.

Senator NELSON. How much was involved in that contract?

Mr. ROBINSON. I think about $4,000,000.

Senator NELSON. And how much profit did the firm get out of it?

Mr. ROBINSON. We did it at cost to us.

Senator NELSON. At cost to you?

Mr. ROBINSON. At cost to us; it was our offer to do that work at cost to us.

Senator NELSON. Oh, yes.

Mr. ROBINSON. And shortly afterwards we took on some work at the Watertown Arsenal, which we also did at cost to us.

Senator NELSON. At a fixed price?

Mr. ROBINSON. No; what we figured our cost would be; that is, with no compensation for us at all.

Senator NELSON. You did not ask for anything for those two jobs?

Mr. ROBINSON. No, sir.

Senator NELSON. Who paid for the material and the labor, then?

Mr. ROBINSON. The Government.

Senator NELSON. Oh, the Government paid for that?

Mr. ROBINSON. Yes. We handled the work for them; we designed it and executed it.

Senator NELSON. And you have not received any pay for it?

Mr. ROBINSON. No, sir. As closely as we could figure, we were paid exactly what it cost us to do it—for the cost of the designing, the cost of the execution, and all that sort of thing.

Senator NELSON. Well, how much was that?

Mr. ROBINSON. I do not remember that; I have not those figures in mind.

Senator NELSON. You say you were not paid anything? You were paid something for bossing the job, were you not?

Mr. ROBINSON. Oh, yes.

Senator NELSON. Then, why did you say you were not paid anything?

Mr. ROBINSON. Because we were only paid what we figured the job would cost us to do, Senator Nelson.

Senator NELSON. And what figure did it cost you to do, then?

Mr. ROBINSON. We based it on our records over a long term of years—that if we would do certain work, it would cost us a certain percentage of the cost; and if we would do certain other things, it would cost a certain percentage of the cost, as nearly as we could approximate.

Senator NELSON. Well, what was the figure? Do not merely convey the idea that you were to do it for nothing.

Mr. ROBINSON. That was the idea.

Senator NELSON. How is that—that you were to do it for nothing?

Mr. ROBINSON. That we were to do it for nothing, as a service for the Government.

Senator JONES. Did you figure your time in in estimating the cost of the work?

Mr. ROBINSON. We took our average overhead cost for a term of years.

Senator JONES. So that you figured in your own time at what you considered it was reasonably worth?

Mr. ROBINSON. Yes. Then the question of——

The CHAIRMAN (interposing). You figured that the Government would compensate your help—your employees and your officers and all of those expenses?

Mr. ROBINSON. Yes. That was our offer and what we were trying to do.

Senator NELSON. In other words, they paid you for your work?

Senator HARDING. Let me see, Mr. Chairman, if I can not bring this point out clearly: The service, if I understand you correctly, Mr. Robinson, was rendered at cost, without a profit. Am I correct in that?

Mr. ROBINSON. That is correct. That is, as closely as we could figure, based on our cost extending over a period of years for similar work.

Senator HARDING. Well, that is so unusual that I will ask, What was the occasion for doing that?

Mr. ROBINSON. The occasion for that—I do not know whether I stated that before you came in, Senator—was that we all wanted to serve the Government. We had a large organization, and we felt that we could do more for the Government working as an organization along the lines in which we were accustomed to work. A lot of our men were eager and anxious to get out and do things for the Government—to enlist, or do some other thing, as many of those who have come here to Washington have done, and so on—and we thought that we could do better working along our usual lines——

Senator FERNALD. Keeping your organization together?

Mr. ROBINSON. Yes; keeping our organization together and doing work for the Government, and really be of service in that way. That was our object.

The CHAIRMAN. Without making anything out of it yourselves?

Mr. ROBINSON. Without making anything at all out it ourselves; yes, sir.

Senator JONES. Well, I would like to understand this; I may be dull, but I want to know if, in figuring out the cost, you included in that a reasonable compensation for your individual services? That is, not the services of the employees of Stone & Webster, but those of the members of the firm or company.

Mr. ROBINSON. There was no particular figure set aside for my services; no. But it was such items as the rent, clerks, stenographers——

Senator JONES (interposing). Well, I am not talking about that, Mr. Robinson.

Mr. ROBINSON. That is how we figured our costs.

Senator JONES. Well, did you figure your own time?

Mr. ROBINSON. No.

Senator JONES (continuing). And the value of your services in determining the cost?

Mr. ROBINSON. No; that was not charged in it, specifically.

Senator JONES. Well, was it covered generally?

Mr. ROBINSON. Well, as a partner, I would say, no; it was not.

Senator JONES. Well, what about as an individual, then?

Mr. ROBINSON. Well, what I mean is that I do not have any salary; I do not go in as a part of the cost of the work. Everybody who is paid a salary and has to do with that end of the work is figured in as a part of the overhead expenses.

Senator JONES. I will put it in this way: Do you consider, not only that you got no profit, what you would ordinarily call profit, but that you got no compensation for the time that you spent on the work?

Mr. ROBINSON. No; not for me at all; none whatever.

The CHAIRMAN. What other contracts did you have, or what other work did you do for the Government?

Mr. ROBINSON. There was a contract at the Picatinny Arsenal, which was a powder storage proposition.

Senator NELSON. Where was that?

Mr. ROBINSON. At Picatinny, N. J.

The CHAIRMAN. What were the terms of that contract?

Mr. ROBINSON. It was the standard form of cantonment contract that had been adopted, as I recollect; it was on the same basis as the contracts that were being given to many other contractors at that time.

Senator NELSON. Was that a cantonment, too?

Mr. ROBINSON. No; it was a powder storage proposition; a lot of small, separate buildings.

Senator NELSON. How much was involved in that?

Mr. ROBINSON. I have not the figures in mind.

The CHAIRMAN. Can you tell the committee, roughly, whether it was $5,000,000 or $10,000,000?

Mr. ROBINSON. I think it was around $1,500,000.

Senator NELSON. What other Government contracts have you had?

Mr. ROBINSON. We had a National-Guard-camp contract, that wa taken by a concern that we were interested in.

Senator VARDAMAN. What concern is that?

Mr. ROBINSON. The Fred A. Jones Co.; our interest in it was pei fectly well known at the time that the contract was given—it wa all explained. We also had an aviation camp that was near th cantonment at San Antonio, Tex.

Senator NELSON. And how much was involved in that?

Mr. ROBINSON. I have not the figures in mind.

Senator HARDING. Do you mean the Kelley Field?

Mr. ROBINSON. The Kelley Field.

Senator NELSON. What more Government work have you had?

The CHAIRMAN. Those two contracts, that you have named, abou how many millions of dollars, roughly, did they involve?

Mr. ROBINSON. There is another Government contract that we had which was in connection with shops and buildings of different kind in France. We did not furnish the labor there, but we did all of th designing work on that, and we have a force of men in France look ing out for the erection of buildings, etc. To the best of my reco lection, that covers our activities along those lines.

The CHAIRMAN. You have not yet given the committee an idea c about the amounts involved in those last three contracts.

Mr. ROBINSON. As to the last one—the contract in France—it hard to tell. It depends on whether the materials get over there c not; but I should say that that may run somewhere around $12 000,000. That would vary very much from time to time. That wa a contract for a large number of shops, the designing, and that so of thing—repair shops and gun shops.

Senator VARDAMAN. What were the terms of the contract?

Mr. ROBINSON. I think the terms of that contract were along th lines of the cantonment contract, except, that instead of a minimun of 6 per cent, which was the standard form of contract, we tool that work at 3½ per cent, for the reason that the designing was com paratively simple, in that there were a great many buildings of th repeat type.

Senator VARDAMAN. The Government pays all the expenses, an gives you a commission of 3½ per cent on that?

Mr. ROBINSON. Yes, sir; they pay the expenses.

Senator VARDAMAN. Have you a copy of that contract?

Mr. ROBINSON. I have not one with me, but we could produce it and it is on file here with the Government, of course.

The CHAIRMAN. That contract for the aviation camp, to whic you referred, how much did that amount to?

Mr. ROBINSON. I can not say, Mr. Chairman, but I can get th figures for all of those contracts for you. I have not them in mind a this time.

(The statement referred to was subsequently submitted by Mi Robinson, and is here printed in full as follows:)

	Estimated cos
Construction of cantonment at Camp Travis, near San Antonio, Tex	85,760,00
Design and construction of buildings at Rock Island Arsenal	3,800,00
Design and construction of buildings at Watertown Arsenal	6,600,00
Construction of aviation training camp, temporary warehouse, and sundry buildings at Camp Kelley Fields, near San Antonio	2,700,00

	Estimated cost.
Design and construction of an ordnance depot at [illegible], including design, purchase, and installation of all machinery and equipment with its power supply	[illegible]
Design and construction of a storehouse at [illegible] Arsenal	[illegible]
Construction of aviation camp hospital, sewer [illegible], water system, fire-protection system, etc	[illegible]
Construction of National guard camp at [illegible], Jones Co.	[illegible]
Construction of aviation training camp at [illegible], Jones Co.	[illegible]

The CHAIRMAN. That aviation [illegible] was at the Kelly [illegible] say?

Mr. ROBINSON. Yes, sir; that was near the San Antonio [illegible] ment.

Senator HARDING. There are two Kelly Fields there, Kelly Field No. 1 and Kelly Field No. 2.

Mr. ROBINSON. We had No. 2.

The CHAIRMAN. You speak of Stone & Webster, and you mention the Stone & Webster Engineering Co. as another concern. What was the relationship between the two?

Mr. ROBINSON. The Stone & Webster Engineering Corporation was merely an incorporated department of Stone & Webster for the purpose of organization; that was all. You might call it an organized or incorporated department to handle that end of their business; that is all. And that corporation no longer exists, so that all the activities are under one name, the name of the firm at the present time.

The CHAIRMAN. Stone & Webster are a partnership, are they not?

Mr. ROBINSON. Yes, sir; a partnership.

The CHAIRMAN. Composed of whom?

Mr. ROBINSON. Composed of Mr. Stone, Mr. Webster, Mr. Russell Robb, Mr. Henry G. Bradlee, Mr. John W. Hallowell, and myself. There are six of us. Mr. Eliot Wadsworth used to be with us, but he left us to take charge of Red Cross work here.

The CHAIRMAN. You are the president of the American International Shipbuilding Corporation, are you?

Mr. ROBINSON. Yes, sir.

The CHAIRMAN. Which has charge of the work at Hog Island?

Mr. ROBINSON. It has charge of the work at Hog Island; yes, sir.

The CHAIRMAN. When was that corporation formed and who constitute its officers and board of directors?

Mr. ROBINSON. That corporation was formed at my suggestion, Mr. Chairman, for the same purposes that the Stone & Webster Engineering Corporation was originally formed for to knit the organization together that was going to do that work, so that it could be defined and set off from any other activity. That was my suggestion, and I discussed the matter with Admiral Capps and got his permission to do it, because we were bringing into this organization not only our own men but men from the outside, men from the New York Shipbuilding Co., and men from the American International Corporation, and it seemed better, in order to define the duties and have proper titles and proper organization, to incorporate a company, that is about the only way that sort of thing could be effected. And we had the magnificent capital of $2,000, all owned by the American

International Corporation. The American International Shipbuilding Corporation is practically an incorporated department of the American International Corporation for the purpose of this work and purely for the purpose of doing this work.

The CHAIRMAN. It is a sort of agency for the purpose of handling the work?

Mr. ROBINSON. For the purpose of handling the work and defining the organization.

The CHAIRMAN. Do you keep all the accounts in the name of the Shipbuilding Corporation?

Mr. ROBINSON. Yes; and we received permission from the Shipping Board to act as the agent; but all our acts are guaranteed by the American International Corporation, which took the contract with the Government; and we get no earnings; the earnings, if there are any, are paid directly to the American International Corporation.

Senator NELSON. Who took the contract with the Government?

Mr. ROBINSON. The American International Corporation.

Senator NELSON. This Hog Island contract?

Mr. ROBINSON. Yes, sir.

Senator NELSON. They took the contract?

Mr. ROBINSON. Yes, sir; they took the contract.

Senator NELSON. And after they took the contract you formed this new corporation, did you?

Mr. ROBINSON. Yes, sir; for the purpose of doing the work.

Senator NELSON. Yes; I understand.

Mr. ROBINSON. But all our debts and all our acts are guaranteed by the American International Corporation.

The CHAIRMAN. What concerns are interested in the fee which is paid for this work?

Mr. ROBINSON. The American International Corporation is interested in it; Stone & Webster are interested in it, by an arrangement that they made subsequently to the contract; the New York Shipbuilding Corporation is interested in it.

Senator NELSON. What is the interest of Stone & Webster? What is their proportion of interest in this Hog Island contract? What proportion of it will they get?

Mr. ROBINSON. We get half of anything that is left, after the New York Shipbuilding Corporation and every other expense and debt of every kind are paid.

Senator NELSON. Half of what you call the profits, I suppose?

Mr. ROBINSON. We never call it profit, because we do not consider it so, Senator; we call it "compensation," because it is the same as you would pay to an architect, or an engineer, or a doctor, or a lawyer, for services.

Senator NELSON. I suppose, on the theory upon which you represented or described these other contracts out West, you would say that this work of this corporation at Hog Island was free, gratis work for the Government, would you not?

Mr. ROBINSON. No; I do not make any such pretense as that, Senator.

Senator NELSON. I thought you would switch it off on about the same basis.

Mr. ROBINSON. No; I will give you only the exact facts here, as far as I know them.

The CHAIRMAN. Do you know who the officers and board of directors of the American International Corporation are?

Mr. ROBINSON. Only in a general way. Mr. Stone is president; I know some of the vice presidents, such as Mr. Baldwin, Mr. Connick, and others.

The CHAIRMAN. Perhaps we have that already shown in the record of these hearings.

Mr. ROBINSON. Yes; you have that, Mr. Chairman.

The CHAIRMAN. I believe you did not name the officers and board of directors of the American International Shipbuilding Corporation?

Mr. ROBINSON. The board of directors, so far as I can remember them, are Mr. Baldwin, who is chairman of the board, representing the American International Corporation. I am president, and in general charge of the work. Mr. Connick is one of the vice presidents; Mr. Muhlfeld, who has charge of all construction work for Stone & Webster, is a vice president; Mr. Rogers, who has charge of the general financial matters for Stone & Webster in their business, is a vice president; Mr. Neeland, who is president of the New York Shipbuilding Corporation, is a vice president. I think that is all.

Senator VARDAMAN. Can you give the salaries that those men receive?

Mr. ROBINSON. Those men receive no salaries whatever from the Government.

Senator VARDAMAN. Well, I mean from their own companies?

Mr. ROBINSON. No; I can not. I might in some instances.

Senator VARDAMAN. Well, state such of them as you know.

Mr. ROBINSON. Well, Mr. Muhlfeld's salary is, to the best of my recollection, $20,000 a year, plus an indefinite amount, dependent upon results of our business. Mr. Neeland's salary I do not know.

Senator NELSON. What is Mr. Connick's salary?

Mr. ROBINSON. I do not know that.

Senator JONES. What is your salary as president of the Shipbuilding Corporation?

Senator VARDAMAN. Will you be kind enough to insert those salaries in the record when your testimony is sent to you for revision?

Mr. ROBINSON. I will try to get them and insert them in the record.

Senator VARDAMAN. What is your salary?

Mr. ROBINSON. I have no salary; what I get depends on what is earned.

(The statement referred to was subsequently submitted by Mr. Robinson and is here printed in full, as follows:)

Neither Mr. Baldwin, Mr. Connick, Mr. Rogers, Mr. Neeland, nor myself received any salaries from the American International Shipbuilding Corporation nor from the Government, and I do not know, of my knowledge, what these gentlemen receive as salaries from the respective corporations for which they are working. This information, however, can be given by the respective gentlemen themselves, or can be ascertained from the corporations they are connected with.

The CHAIRMAN. This Shipbuilding Corporation was formed when, and under the laws of what State?

Mr. ROBINSON. I do not know; that was of so little importance that I have not paid any attention to it. All that I have tried to do

in running the job was to get an operating organization put together. But it will be easy for me to procure that information.

The CHAIRMAN. Then, I wish you would insert in the record at this point the date of the charter of the Shipbuilding Corporation, and under the laws of what State it was organized.

Mr. ROBINSON. I will be glad to do so, Mr. Chairman.

(The statement referred to was subsequently submitted by Mr. Robinson, and is here printed in full, as follows:)

The American International Shipbuilding Corporation was incorporated September 27, 1917, under the laws of the State of Delaware.

The CHAIRMAN. I suppose the Shipbuilding Corporation was formed at the time the contract for this work was made?

Mr. ROBINSON. Yes; it was formed a little while after that, I think; within the first week or two after the contract was signed.

Senator NELSON. That was last September, then?

Mr. ROBINSON. The contract was made in September.

The CHAIRMAN. Did you go there and take charge of this work from the beginning?

Mr. ROBINSON. Yes, sir; I have been living in Philadelphia practically ever since the contract was signed.

The CHAIRMAN. And you have been giving your attention to the work right along?

Mr. ROBINSON. I have; practically undivided attention.

The CHAIRMAN. You have given practically undivided attention to it?

Mr. ROBINSON. Yes, sir; I have been looking after practically nothing else.

The CHAIRMAN. And you have been doing that ever since the contract was signed?

Mr. ROBINSON. I began right after it was signed. And the way that I happened to do that was, that in the early stages of the war the shipbuilding situation became very acute in this country and Mr. Muhlfeld and I went out to the Pacific coast; we had heard about how they were speeding the work rapidly in the shipyards around Seattle and we had friends out there and knew the country there, and we thought we might learn something by going out there and examining the situation. We did go to the yards there and saw how they were equipped; saw the appliances that they were using in the construction of boats, and so on, and while we were not shipbuilders we could not find that there was any particular mystery about building steel cargo vessels. It struck us that it was more a matter of organization, of ability to plan the thing properly and bring the right kind of organization to bear on it than anything else, and it was an undertaking that, with our familiarity with the fabricating people in the country, and the machinery-building people in the country, we thought we were particularly well fitted to undertake. We had done quite a lot of business for outside people. I have a list here [indicating] showing the projects all over the country with which we had been connected; there was the power plant of the Pacific Light and Power Corporation of Los Angeles, Los Angeles, Cal., involving something over $12,000,000; a water-power project on the Missouri River; the Northwestern electric project, and so on down.

Senator NELSON. Did your corporation, or the firm of Stone & Webster, become interested in any yards on the Pacific coast?

Mr. ROBINSON. No, sir.

Senator NELSON. You have no interest in any of them?

Mr. ROBINSON. None whatever. Mr. Muhlfeld and I came back to the East; and shortly afterwards the American International Corporation approached me, to see if I would become interested with them in a shipbuilding proposition which they had, which they said was a matter of building a couple of hundred fabricated steel vessels. And I felt that it was not a problem for an individual to undertake, but with the organization that I had, which had been built up in the different work we had done, and that could be made available for this work, I thought we could quite properly undertake it.

We looked into the matter from a great many different angles. They said they could bring to the proposition the services of the New York Shipbuilding Corporation, in which they had become interested, and which had been in business for 17 years and had a special staff of naval architects, which would supplement what our organization did not have—that is the special talent for shipbuilding work.

The proposition, as I saw it, that confronted the country at that time was to increase the tonnage-producing facilities of this country without interfering with or withdrawing or subtracting in any way from the existing tonnage-producing facilities or interfering with their growth. That meant going out and building along entirely new lines, calling upon the old, experienced people just as little as possible, and building up a scheme of utilizing the energies and the experience of the fabricating people all over the country, the machinery building people, the pipe builders, and everything of that sort.

In other words, our plan was not, as I saw the thing, a proposition of building a new shipyard, but a proposition to build a machine there which could receive material fabricated for it, machinery built for it, and all that sort of thing, and put it together; in other words, an assembling plant. Our proposition there is to do nothing at Hog Island that we can get done for us.

That, of course, resulted in a minimum amount of disturbance all along the line to the industries of this country; and it meant utilizing the organizations that had been working together where they were; utilizing the plants that had been built up.

Senator VARDAMAN. Mr. Robinson, was it not your rule that, where you transferred labor or men from different places or different organizations, you uniformly paid them larger salaries to work at Hog Island than they had been receiving?

Mr. ROBINSON. No; not at all, Senator. I was going to come to that point a little further along; I wanted to touch on that question of salaries in general, since it has been brought up.

As we saw this Hog Island project we went at it from the standpoint of a construction matter. The special shipbuilding experience we got from the New York Shipbuilding Corporation, but the bulk of the work there was in the nature of construction work that was, in itself, simple—with which we were perfectly familiar, which my organization had been working on all over the country for a great many years. It was simply a problem of magnitude, and part of the magnitude was due to the speed that had to be attained. If you took a job which ordinarily you would do in 12 months and did it in

months you more than double the size of it, because your rate of doing it is that much greater.

Senator FERNALD. How many men have you there at Hog Island all told, Mr. Robinson?

Mr. ROBINSON. I should say around 20,000 men, without counting the overhead. But altogether, I think, it is around 22,000 people, probably.

Now, of course, we did not have in our own organization, big as it was, enough men properly to man that whole yard, and we contemplated, from the first, calling in the assistance of contractors that we were familiar with and that we had been in competition with and that had been pushing us on other work. It was our business to take our own organization, put it in there as rapidly as we could, then get these organizations of these other contractors and just merge the thing into a harmonious whole under our control and under our direction. And what we brought to the job, above everything, was the organization that had been working together and knew how to work together and could be put on the work quickly.

The CHAIRMAN. Mr. Robinson, in describing your situation at that time, you have frequently used the term "organization"; and I do not think there is a clear understanding of what you mean by "organization" in that connection. Will you explain just what you mean by the word in that connection?

Mr. ROBINSON. What I mean by "organization" is this: We have had as many as 35 or 40 separate jobs going on at one time. They were each under the charge of a competent man, or superintendent; he would have his engineers, his accountants, his timekeepers, his various foremen, and help of all sorts and kinds. And in our work extending over a period of years, we have become acquainted with a large number of those men. We have had altogether as high as 40,000 men in our employ on construction work.

Senator NELSON. That has been mostly laborers, has it not?

Mr. ROBINSON. A large part is labor, but we have furnished——

Senator NELSON (interposing). You do not mean to say you have had 40,000 men who were experts?

Mr. ROBINSON. Oh, no, Senator; but I mean we have had the ability; we have had the trained men, the men who have been with us, who had the ability to direct that number of men on various occupations.

Senator NELSON. But they had not been engaged in shipbuilding construction before, had they?

Mr. ROBINSON. No.

Senator NELSON. Nor in constructing shipbuilding yards?

Mr. ROBINSON. No.

Senator NELSON. Nor in driving piles, or anything of that sort?

Mr. ROBINSON. Yes; a great many had been engaged in driving piles; they had been doing every element of the work that goes into that yard. The work of building that yard resolves itself into grading, building sewers, water systems, pile driving, steel work, steel buildings, concrete work——

Senator NELSON (interposing). Well, that was done mostly by ordinary laborers; that did not require a great firm like Stone & Webster to get that kind of help, did it?

Mr. ROBINSON. I think it did, to get the proper kind of direction of it.

Senator VARDAMAN. If your organization had the requisite labor, what was the necessity for the expenditure of $15,000 or $20,000 a year for your publicity bureau?

Senator NELSON. It was $25,000 a year.

Mr. ROBINSON. Well, I have some ideas on that, too, Senator, that I was coming to in a few moments. But I can answer that question right now. The real difficulty, so far as manning that yard is concerned, as I saw it, is in the future. We never did have any doubt of the ability to carry on the construction work; and I think the most serious element connected with the undertaking—and I have felt so from the first—is the ability properly to man it as a shipbuilding concern.

We have discussed that with the Shipping Board, and did from the very beginning; and we were assured by them that we would not have any trouble about that. And, of course, the matter of getting labor in large numbers is entirely out of private control anyway, and was so at the time this contract was made; and we depended on the——

Senator VARDAMAN (interposing). Some of the witnesses before this committee have testified that you had such an excess of labor there at times that only a very small per cent of the men were at work. Mr. Felton, or somebody else, testified that you had an exuberance and an excess of labor—probably those gentlemen who received those salaries advertised too much.

Mr. ROBINSON. Well, I do not agree with whoever testified to that; because what we were getting there was speed, and that is the way we were purchasing it. And we have looked on this enterprise as a war measure; as a part of the war machine; and we have had it in our minds, every one of us, right from the beginning, that a month's delay now is a month's delay on every boat, and a month's delay on the whole number of boats—and those boats are worth $9,000,000 a month to the Government, outside of any use of them in connection with winning the war. And that is the thing that we have had in mind; and we have felt we must do anything to get speed.

Senator NELSON. Did it tend to produce speed to have an overplus of men, to have the yard crowded with laborers that you could not use?

Mr. ROBINSON. I do not admit that that was the case. We were using our best efforts to get ahead every inch that we could in every way that was practicable.

Senator JOHNSON. Before you leave the question of your organization, if you were about to pass to another subject, there are several questions I should like to ask you.

Mr. ROBINSON. I was coming back to that subject again, from a certain angle, Senator.

Senator JOHNSON. I do not want to interrupt your thought in any particular; but if you are on the question of organization, there are a few interrogatories that I wish to propound to you in that regard.

Mr. ROBINSON. All right, sir.

Senator JOHNSON. When you speak of your organization, do yo mean an organization that is engaged simultaneously in the con struction of many plants?

Mr. ROBINSON. Yes; that is exactly what I mean, Senator. W have been engaged, as I tried to say, in 35 or 40 distinct places simu taneously.

Senator JOHNSON. Does your organization, in quantity and i quality, vary with the amount of work that you have on hand?

Mr. ROBINSON. I would say, yes, it varies in both, because, whil we try to keep the best men through thick and thin, and do so, c course, when we have the least amount of work, we have the greate number of the best men available for it, because those are the one we keep.

Senator JOHNSON. Was your organization in September, Octobe November, and December of last year engaged in more than on undertaking?

Mr. ROBINSON. Yes, indeed.

Senator JOHNSON. In how many undertakings was your organiza tion engaged during those four months?

Mr. ROBINSON. In September——

Senator JOHNSON. October, November, and December of 1917?

Mr. ROBINSON. I can not say, because a large part of our wor was tapering off. For instance, just about the time we got this wor started, when we got the information upon which to really begi construction work, we were practically through with constructio work in Texas, and that organization was transferred bodily to Ho Island. We had put into the San Antonio works something ove 200 men of all sorts and kinds.

Senator JOHNSON. Did the 200 men at San Antonio represent you organization there?

Mr. ROBINSON. They represented the organization that we put in I mean they were men that had been connected with us in some wa at some other place, that we knew about.

Senator JOHNSON. I was going to ask if that practically repre sented your organization in Texas at that time?

Mr. ROBINSON. I should say partially, in addition to some that w already had in Texas before then—but approximately so.

Senator JOHNSON. Well, when you began work at Hog Islan your organization represented approximately how many men, if yo please?

Mr. ROBINSON. That is a pretty hard thing to answer. We starte in and expanded very rapidly.

Senator JOHNSON. Well, approximately; I do not expect you t answer that with absolute exactness, as to a question of numbers.

Mr. ROBINSON. I should say that within two weeks we had full 100 men in there.

Senator JOHNSON. At Hog Island?

Mr. ROBINSON. Yes, sir; that is, connected with it, in the plan ning and at the Philadelphia office.

Senator JOHNSON. And those men, constituting your organizatior were to undertake specifically just what, at Hog Island?

Mr. ROBINSON. They were to undertake the planning of the work and the execution of the work, and all that went with it.

Senator JOHNSON. All of the work was done, however, by specific contracts that were independently let?

Mr. ROBINSON. No.

Senator JOHNSON. How great a proportion of it?

Mr. ROBINSON. We have handled, I should say, based on the pay roll, fully 70 per cent of the work there with our own forces, and, of course, we have men directing—not directing, but attached to any subcontractors who are working there with us.

Senator JOHNSON. Do you feel quite accurate in that? I ask that because my understanding was that by special contracts a very large percentage of the work had been let out by you at Hog Island?

Mr. ROBINSON. Well, as near as I can say, it would lie somewhere between 30 and 50 per cent, but not very much over 30 per cent, I should hay offhand. I have not had occasion to look that up, but judging from a pay rool that I saw at one time when I did have occasion to go into it, we were handling then on the work we were doing—the building of the roads and shops and buildings—I should say about 70 per cent of the common labor that was working at Hog Island at that time.

Senator VARDAMAN. Pardon me, Senator Johnson, but just there I want to ask Mr. Robinson to state what work, or what construction, at that plant has been sublet?

Mr. ROBINSON. I think I can state the most of it. We sublet the ways to five different contractors, in groups of 10 each.

Senator JOHNSON. Was that not a very large percentage of your work?

Mr. ROBINSON. It was quite a percentage, but I would not say a very large percentage. I have not the exact figures in mind.

Senator JOHNSON. All right. We start now with the ways, which were sublet to other contractors.

Mr. ROBINSON. Yes.

Senator JOHNSON. What else was sublet?

Mr. JOHNSON. We sublet a good deal of the railroad work—most of it.

Senator JOHNSON. Substantially all of it, did you not?

Mr. ROBINSON. I think so; but I think we have done some of it there.

Senator JOHNSON. What else did you sublet?

Mr. ROBINSON. We sublet the work on the wet basins.

Senator JOHNSON. When you say "wet basins," just what do you mean?

Mr. ROBINSON. I mean the piers. We have there seven piers projecting some 1,000 feet, and the wharves.

Senator JOHNSON. All of that work was sublet, was it not?

Mr. ROBINSON. Yes, sir; and, of course, we have sublet all the dredging, because we have had to hire the dredging equipment.

Senator JOHNSON. Can you name anything else that was sublet?

Mr. ROBINSON. We sublet the sewer and water system, and I think we have sublet some of the piping work. I think that pretty well covers it.

Senator HARDING. What do you mean by "piping"?

Mr. ROBINSON. Air piping, and miscelaneous piping of that sort, connected with the ways.

Senator JOHNSON. Have you stated all that you can recall that you have sublet?

Mr. ROBINSON. I think so; yes.

The CHAIRMAN. How about the electric lighting?

Mr. ROBINSON. I think we have been handling all that work ourselves, practically.

Senator JOHNSON. Will you state, if you please, what your organization has handled, then?

Mr. ROBINSON. Our organization has handled the grading work there—a great deal of it.

Senator JOHNSON. You say "a great deal." Do you qualify that now by saying "a part of it"?

Mr. ROBINSON. Well, I should think all. Mr. Muhlfeld, who will follow me in appearing before the committee, can give you more of those details than I can. I am trying to give you the best of my immediate knowledge.

Senator JOHNSON. Yes; I understand.

Mr. ROBINSON. We handle all the building work there; the commissary buildings and the administration buildings, and all the general building work around the island, and the roads and the shops. I think we sublet the pile driving on the shop foundations, too, in addition to those I stated.

The CHAIRMAN. Can you give the committee a general idea about the building work; what do you mean by the "building work"?

Mr. ROBINSON. The administration building, the buildings for the engineers, and the fire houses, and the quarters for the men, and the general structures around the island. We handle with our own forces the power supply, the substation building, and the electrical work, and that sort of thing. Those buildings are all a matter of record, Mr. Chairman, and can be gotten at exactly, if it is a matter of interest.

Senator JOHNSON. Does that represent, do you think, 70 per cent of the cost?

Mr. ROBINSON. I can not say offhand whether it represents 70 per cent of the cost, but at the time I had occasion to look it up we had about 70 per cent of the labor on our work; but whether that is a fair indication of the total cost of the work I do not know.

Senator VARDAMAN. That was in the beginning of the work, was it not?

Mr. ROBINSON. No; I should say it was about six weeks ago.

Senator HARDING. Well, you would hardly think, Mr. Robinson, that that would represent 70 per cent of the cost, would you, in view of the fact that you were contracting for pile drivers and steam shovels, and things of that kind?

Mr. ROBINSON. Not 70 per cent of the cost of the work under way, but of the total cost that would be done there ultimately. You see, we had the derrick towers, which we were working on with our own forces, and the derricks and derrick machinery, and all those things that would come along subsequently to be done in connection with the work of the other people. Of course, our object in subletting that work was to make use of other organizations, and the foremen and superintendents and equipment that other contractors had. And that plan lent itself to the speed of the work.

Senator VARDAMAN. I wish you would state at this time, if you can, the number of subcontractors and who they are.

Mr. ROBINSON. I would say, offhand, that there are about a dozen of them; whether I can name them all, I do not know. But those I can name offhand are the Jarrett-Chambers Construction Co., on ways; the Snare & Triest Co., on ways; Arthur McMullen, on ways; the Raymond Concrete Pile Co., on ways; and Hugh Nawn, on ways; the Kellogg Construction Co., on piping; the Mainwaring Co., on railroads; the Bates & Rogers Construction Co., on railroads; Holbrook, Cabot & Rollings, on piers and wet basins; and the dredging companies, on dredging work.

The CHAIRMAN. Are Stone & Webster or the American International Corporation interested in any of those subcontractors?

Mr. ROBINSON. They have no interest whatever, Mr. Chairman. We have no fee on the yard at all, as has been explained here.

The CHAIRMAN. You will probably soon finish with those people as a construction force; what will you do with your forces then? Will they be ready to begin on the building of ships?

Mr. ROBINSON. The construction forces will work over into the shipbuilding. Of course, we have got shops to build and machinery to install there, and the general overhead organization that we put in there will work over into the operating organization in connection with building the ships.

Senator VARDAMAN. Are any of the stockholders in the parent company that is doing this work for the Government interested in any of the companies that have taken subcontracts?

Mr. ROBINSON. I do not know, sir. So far as I know, they are not.

Senator HARDING. Let me ask you this question: What is the nature of these subcontracts? What is the basis of compensation in them?

Mr. ROBINSON. The basis of all these contracts—practically, if not quite all—is that we made up, in consultation with the contractors, an estimate of the cost of the work that they were going to do, and also a list of the equipment that would be required, and that they would bring onto the job. Then the contract was made on an agency basis with them, and they were paid a fixed amount of money as rental for the equipment and as compensation to them for doing the work, whether that work as actually performed exceeds the estimate or comes under the estimate; they have an incentive to get the work done quickly and promptly—and speed was what we were trying to get all along the line—from the fact that they got no more money from the use of their equipment for six months than they would get for the use of it for two months; we paid them so much for the equipment for doing the work.

Senator VARDAMAN. Will you explain more fully as to the rental of the equipment, and state what you rented?

Mr. ROBINSON. We rented the pile drivers, and hoisting engines, and things of that sort.

Senator VARDAMAN. On what basis did you pay them a rental for that equipment?

Mr. ROBINSON. The rental was based on the estimated value, and the estimated time that it would be on the job.

Senator VARDAMAN. What was the estimated value of the pile driver, for instance, and what did you pay as rental for that?

Mr. ROBINSON. I can not tell you that from memory; but any o those contracts can be put in evidence before this committee, an they would show you exactly what the proposition was. Beside you understand, do you not, that those things were all discusse with the representatives of the Shipping Board, and gone over wit them before the contracts were entered into, and the thing explaine to them.

Senator VARDAMAN. Is that true also with reference to the emplo ment of men all the way through?

Mr. ROBINSON. The employment of men?

Senator VARDAMAN. I mean the high-salaried men?

Mr. ROBINSON. Yes; we discussed those also with them. In t early days, we did not, because we had to get the force togeth But before the Shipping Board paid any of the salaries, we carri those people at our expense account for two or three months, most them, until we got a chance to assemble them and go over them w the Shipping Board people.

Senator VARDAMAN. Well, there has been a great reduction in t number of them since the representatives of the Shipping Bo have looked over them, has there not?

Mr. ROBINSON. I do not think so.

Senator VARDAMAN. Has not Admiral Bowles, in the last f weeks, cut down the salaries something like a quarter of a milli dollars?

Mr. ROBINSON. I would not say so; no.

Senator HARDING. Mr. Robinson, I understood you to say a few moments ago that the rental of those various machines was the same whether the machine was used for three months or for six months?

Mr. ROBINSON. Yes, sir. That is, we figured that it ought to take them four months to do a certain job; and the machinery would therefore be there for four months, and the rental paid would also be for four months.

(Thereupon, at 3 o'clock p. m. the committee took a recess of 20 minutes, on account of a roll call in the Senate, after which the folfowing proceedings were had:)

The CHAIRMAN. Mr. Robinson, you may now resume your statement where you were interrupted.

Mr. ROBINSON. I was about to speak of the type of contract. There have been some comments made on the type of contract used here; and I will say that in my opinion it was the only form of contract that could be considered under the circumstances. There was not any individual, or any group of individuals, I believe, that would have been justified, under the circumstances, with the country just starting in a war as to the length of which nobody knows; with the changes in industrial conditions, the changes in the prices of material and labor, and so on—nobody would have been justified in undertaking that as a private venture with their own money. The only form of contract that I know of that I think is fair to both parties under those conditions is an agency form of contract, where the agent is to receive a fee for the service he performs. In that form of contract, the interest of the owner and of the doer lie side by side. We have been working under that kind of contract for, probably, nearly 15 years, and we have done millions of dollars' worth

of work under it. We have succeeded in convincing hundreds of sane business men that their interests were perfectly safe in our hands under a contract of that kind.

Senator JONES. Will you specify some of the contracts that you have carried out under similar contract provisions?

Mr. ROBINSON. Yes; certainly. I have a list of them here [indicating]. The largest was the Pacific Light & Power Corporation, $12,000,000.

Senator JONES. Where is that located?

Mr. ROBINSON. That is located in Los Angeles, Cal.; a 240-mile transmission, and two water powers.

The CHAIRMAN. What was the amount of your fee in that case?

Mr. ROBINSON. The amount of our fee in that contract was in the neighborhood of $500,000, according to my recollection.

The CHAIRMAN. Is that on an estimated-cost basis?

Mr. ROBINSON. My recollection is that it was a fee based on the estimated cost of the work. In other words, we have done work on two bases: One being for a percentage of the cost, which is very similar to a fee basis. But wherever we can, we always prefer, and always get our client to put it on to the fee basis; in other words, our compensation on those contracts is determined before we do the work. Suppose, for instance, we estimate that a job will cost $1,000,000; our fee will be so much, based on that cost. If the job cost $1,500,000, instead of $1,000,000, we do not get a cent more. The objection to the percentage form of contract is that the fee is increased as the cost of the work increases; and, whether rightly or wrongly, the man who is doing the work is frequently charged with running the cost up and benefiting from it.

In order to eliminate all of that, we always try to get our clients to put the contract on the fee basis, so that that suspicion will not lie against us.

The CHAIRMAN. What I am trying to get at is, What is the usual commercial contract on the fee basis, such as you have just mentioned?

Mr. ROBINSON. That depends on what you are going to do under the contract, Mr. Chairman. If you are going to do the designing and the construction, it would range anywhere from 10 per cent down to, perhaps, 7½ per cent, or 8 per cent, or 9 per cent, dependent on the size of the job. If you are going to do the construction work on somebody else's plans, it would vary anywhere from 5 per cent to 7½ per cent, depending on the size of the job. But where you do the whole thing, both the designing and the construction work, the usual rate of fee is 10 per cent. But that, of course, is always a matter of trading in individual cases. Some people manage to get contracts based on a fee of 12½ per cent; I have known of cases of that kind.

Senator JONES. Now, will you specify some work that you have done from the ground up, just as you have done in this case?

Mr. ROBINSON. Yes; we built the buildings for the Massachusetts Institute of Technology, their new plant, costing five or six million dollars. We built the power plant for the Edison Electric Light Co. at New Bedford, costing, I think, three or four million dollars. We have been specializing on doing rapid work: on doing work quickly

and with economy; that is what we have been specializing on; and there is only one way you can do that. Take the case of the Buffalo General Electric Co.; a good deal of their Niagara power was commandeered by the Canadian Government; it was power derived from Canadian sources, and the Canadian Government commandeered it; so they had to have steam power to supplement that and had to get it quickly; they gave us a contract to build them a power station.

Senator JONES. Well, have you taken up any project different from what you had theretofore done——

Mr. ROBINSON. In this? No, sir.

Senator JONES (continuing). And developed it right from the ground up?

Mr. ROBINSON. No, sir.

Senator JONES. This is the first one?

Mr. ROBINSON. On the contrary—I misunderstood you. This is not very different from a number of other things that we have done.

Senator JONES. Well, name a number of the things you have done which are similar to this. Here is a shipbuilding proposition, and as I understand, you had not been engaged in that kind of work before?

Mr. ROBINSON. No; but the elements of it are very similar to the work in other projects on which we have been engaged.

Senator JONES. I understand that. But here is a new proposition that you had not been before engaged in, that you undertook to work from the ground up.

Mr. ROBINSON. No; but I think that is a misleading way to put it.

Senator JONES. Well, I am not trying to mislead. I am trying to find out something analogous to this proposition on which you had before been engaged.

Mr. ROBINSON. Well, I am not trying to dodge the question, either.

Senator JONES. No; I do not think you are.

Mr. ROBINSON. I appreciate that. But what I am trying to bring out is, that while we have never built a shipyard, or never built a ship—if you want to put it that way—I do not consider that building ships is any different from building steel structures; I do not consider that building a shipyard, or building shipways, is different from building the foundations of any other structure; and if there is any difference we have got all the advice or experience of the New York Shipbuilding Corporation, who have been building their own ways and who have been building ships for years; and we have been working right alongside of their shipyard in Camden, N. J., and have had the benefit of their experience in developing the design and in building the ships and placing the orders for the ships. We have gotten men from them, and we have also obtained aid from some of the other old-line shipbuilders, with their permission, to take charge of the shipbuilding end of it, when we get to the shipbuilding end of it. Our Mr. Goodenough has also had experience in that line.

Senator JONES. I understand; but here is the situation in this case: The Government wanted to get a lot of ships?

Mr. ROBINSON. They wanted to get tonnage quickly.

Senator JONES. They wanted ships built quickly?

Mr. ROBINSON. Yes, sir.

Senator JONES. You did not have the ground for the shipyard before?

Mr. ROBINSON. No, sir.

Senator JONES. But your organization got the ground?

Mr. ROBINSON. Yes, sir.

Senator JONES. And you cleared it and got everything in shape?

Mr. ROBINSON. Yes, sir.

Senator JONES. And put everything that was necessary into the building of ships?

Mr. ROBINSON. Yes, sir.

Senator JONES. Now, where did you ever take up a proposition similar to that in your experience—have you had any such proposition or have you not?

Mr. ROBINSON. Would you consider that that was very different from going into the State of California, for instance—take that Pacific Light & Power Co. hydraulic job, for instance; those power plants were up in the mountains 7,000 feet above sea level. And the very first thing we had to do was to build 55 miles of railroad to get into that place.

Senator JONES. You took the contract to put the power plant in, did you?

Mr. ROBINSON. We took the contract to do the whole thing.

Senator JONES. That was on what basis?

Mr. ROBINSON. That was on the fee basis—all of these things I have mentioned were.

Senator JONES. How was the fee worked out?

Mr. ROBINSON. We estimated what that work would cost; first of all it was the power plant.

Senator JONES. Was that an estimate similar to that which you submitted in this case?

Mr. ROBINSON. No; because in that case they had been working on it a great many years, and had studied it; and we had the benefit of their study and of our own studies as well.

Senator JONES. You worked out, then, in that case, a very minute and detailed estimate of what the cost would be?

Mr. ROBINSON. Yes; comparatively so. But there, again, they were in the same position as the Government is here, that once our fee was determined, whether the work came out within the estimate, or outside the estimate, the estimate had no bearing on the cost of the work, except as a reasonable guess as to what it was going to be.

Senator JONES. I understand that.

Mr. ROBINSON. Well, I thought there had been some misunderstanding about that; that was all.

Senator VARDAMAN. Just at that point, will you answer this question: What was the difference between the estimate of the cost of the project that you have just been discussing with Senator Jones, and the actual cost of the work?

Mr. ROBINSON. I can not say offhand; but I have a man here with me to-day who can give you those figures pretty closely.

Senator VARDAMAN. Was the estimated cost pretty close to the actual cost?

Mr. ROBINSON. I think it was reasonably close; yes. Of course, in any project of that kind they usually make some changes in the scope

of the work as it goes along; somebody has a new idea about it. The people who are interested in it either want more machines put in, or bigger machines, or they change the thing around in some way; and it is an unusual thing that you can start in on a project of that magnitude, taking nearly two years to build, where you can exactly define the scope of your work in advance.

Senator VARDAMAN. What is the difference between the cost of this plant at Hog Island and your estimate of what it would be?

Mr. ROBINSON. I do not know what it will be.

Senator VARDAMAN. Well, you estimated that it would cost about $21,000,000, and you have now expended about $42,000,000 on it.

Mr. ROBINSON. There was a request made at that time to make up an estimate based on 200 boats, on 50 ways, in 18 months; and no details were given on which to base an estimate; and the thing was rounded up, and the people who gave the estimate at the time stated that they did not consider that it was worth anything. It was more an indication of a minimum amount of expenditure than anything else.

Senator VARDAMAN. Well, really it was not worth anything.

Mr. ROBINSON. That is exactly what they were told at the time.

Senator JONES. Your fee had no connection with that cost, did it?

Mr. ROBINSON. Nothing at all. Our fee had nothing to do with that at all—which I think is very fortunate under all the circumstances surrounding this job, in one way or another.

The CHAIRMAN. I do not wish to inquire into your private business at all, Mr. Robinson, but just to give an idea as to whether the fee charged in this case is excessive or otherwise as compared with fees for similar work elsewhere, I would like to ask what percentage of the estimate of the cost of that California project was paid as a fee?

Mr. ROBINSON. Well, I can not remember that offhand, Mr. Chairman, but it is my impression that it was somewhere around 6 per cent: the fee was based on 6 or 7 per cent; I would not say exactly offhand what it was.

Senator VARDAMAN. This is the fee?

Mr. ROBINSON. The nominal fee here, Senator Vardaman, is 5 per cent; the minimum fee is 4 per cent, and we have never had any expectation of being able to do anything more than to win the minimum fee, if we did that.

Senator NELSON. In those other cases you invested your own money?

Mr. ROBINSON. No, sir; not one cent, any more than we are investing here, nor to so great an extent.

Senator VARDAMAN. There was not any patriotism in those contracts.

Senator NELSON. You get on your investment here what little you made—2 per cent more than the Government gets on its Liberty bonds. You get 6 per cent?

Mr. ROBINSON. Yes; but I think that is the usual return on such things. I am not a banker; I do not know.

Senator NELSON. No; but patriotic men, who will work for the good of country, might get down to the basis of Liberty bonds.

Mr. ROBINSON. Yes; that may be. I have a friend out West that I joke a good deal about his 7 per cent mortgages. I do not know

the going rate is. I think conditions apparently differ in one from another.

e CHAIRMAN. You made a different contract with reference to ard, and that sort of thing?

. ROBINSON. I just laid that out, because I wanted to refer to at was all. There is only one type of contract, that is what s talking about, and we have had a great many contracts wher. lients furnished us their money in advance, which we accounted s the work was done. In other words, fundamentally, I do not ;, and have not thought for a great many years, that there was eason why a contractor should have to take a financial risk when es a piece of work, any more than a lawyer or architect or eer or doctor. We are selling our services, just as they sell s, and that idea of doing work has been growing, and a good er of reliable firms practically do all of their work on that of selling their services.

got into this method through doing our own work. We started rawing detailed plans and specifications for our work and let- it out to the contractors and tieing them up with bonds, but it always worth more to us to get the job done and get it to earn- an it was to collect on a bond. We had a case out in Senator n's country, where we built a water power. We contracted that o a firm of contractors, and put them under $100,000 bond. fell down, and it was a question of the general bonding com- taking it over, or a question possibly of our coming in and ring it up and furnishing additional money, which we did, be- it was worth more to us than for us to fall back on the bond. e got into doing work for ourselves, and after we got down nding our money and getting experts, we went into the business ling that service to other people, and we have never attempted Government business until the war came on, when we thought uld serve the Government, and started in by saying we would e work for nothing and at cost to us.

ator NELSON. You do not mean to say you are working for ng on this Hog Island job?

. ROBINSON. No, sir; I do not.

der this fee form of contract it is the only way in which you can eed. We considered this undertaking was a part of the war ma- ; that there was urgent need of tonnage, and that there was t need of getting tonnage facilities, and the only way you can eed is to do that work and plan it at the same time. We started e developing plans on this work and doing the work at the same and there was not any time to sit down and make detailed and specifications, because it would have taken you six months st to do it, and those six months were worth $5,400,000 on these and that is the way we looked at the proposition.

ator NELSON. Do you not think more speed has come up there Admiral Bowles went up and did some weeding out?

ROBINSON. I do not want to get into any controversy over that, or Nelson.

ator NELSON. I want to get your opinion on that.

ROBINSON. Why, no; I do not think so. As a matter of fact, ing Admiral Bowles has done there is to slow some of the work

down; he thought we were going too fast. It is my judgment were not, but we were perfectly willing to accept his judgment in t matter, and we are doing it the way he wanted it done. Our idea w to get the construction work behind us.

Senator NELSON. Has he not cut off some of the salaries you we paying, or that you got the Government to pay?

Mr. ROBINSON. Possibly so; but I think there are going to be so added before he gets through.

Senator NELSON. He has cut down the outlay almost $300,000 year since he came up there?

Mr. ROBINSON. No; I do not think so, Senator.

Senator VARDAMAN. Have you any idea how much he has cut o

Mr. ROBINSON. No; I have not.

The CHAIRMAN. Let us go on.

Senator VARDAMAN. Mr. Chairman, we have a right to ask qu tions of the witness.

The CHAIRMAN. I know it, Senator, but if you go branching into all this matter about what Admiral Bowles is doing, he never get through with his statement.

Mr. ROBINSON. I want to answer all questions.

The CHAIRMAN. I suggest we go on in regular order. He said was going to take up the salary question directly when we get to

Senator VARDAMAN. We might just as well let the witness write o his statement and make it to the committee, the way it suits him, an not as it pleases the committee.

The CHAIRMAN. Go ahead with your questions. I was trying t save time.

Senator VARDAMAN. I was trying to save money for the Gover ment.

The CHAIRMAN (to the witness). You may proceed to answer Se ator Vardaman's questions.

Senator VARDAMAN. Go ahead and make your statements as t chairman directs.

Senator JOHNSON. Mr. Chairman, I do not want any mistake ma as to the manner of examination. I propose to examine this witn after he concludes his statement. Do I understand there is any e bargo put upon that?

The CHAIRMAN. None at all, Senator. I have not suggested su a thing. I only suggested that we proceed with some order. If y want to branch off on every little detail while we are in the midst a statement of the witness, we will not make much progress.

Senator VARDAMAN. I want to state, Mr. Chairman, that I sh not ask a question if I think it is immaterial. It is not a lit question of detail. If I did not think it was pertinent to the is and the American people, I should not ask it.

The CHAIRMAN. Senator, I was only asking that you postpone yo interrogatories until the witness reaches that part of the subject regular order.

Senator VARDAMAN. I will do so, Mr. Chairman.

The CHAIRMAN. The witness was dealing with contracts, and n we want to branch off and ask about what is being done with ref ence to Admiral Bowles, and it seems to me we ought to wait until get to that item of salaries.

Senator NELSON. I am to blame for branching into that.

The CHAIRMAN. No, Senator, the chairman is to blame, too, I think. I think I ought to be able to suggest some order for the hearing. If I am wrong about that, I am willing to stand corrected.

Senator JOHNSON. I evidently misunderstood the chairman. I am quite a distance away, as you see. I did not hear plainly what was said, and that was the reason of the query I made.

The CHAIRMAN. Make any inquiry at all that you desire, Senator. But I thought it was best to proceed in regular order, and then, when we get to that question, go into it in detail. Of course, if the committee care to discontinue that line of inquiry and go into another, I have no objection to it. Only, I think, we are losing time, because we are going to go into it anyhow a little later on.

You may proceed, Mr. Robinson.

Mr. ROBINSON. We had this contract pretty well worked out when the difficulties arose in the Shipping Board, and things were laid aside until we got into it again with Admiral Capps when he came into the Shipping Board. I had known Admiral Capps for a great many years. I met him years before in the Navy Department, and I found him the same courteous gentleman he was at that time, and it was a great pleasure to work the matter out with him. He had a great sense of his obligation to the Government, and I regret that it has been stated that time was wasted in trading all this thing out. I never considered it so, when you consider the magnitude of the operation. I consider we did very well to get the contract traded out in the time we did.

Admiral Capps had a great many other duties to perform, and I have a great admiration for the way he had the situation in mind and for what he was trying to accomplish for the country. I believe he did a great work, not only in these contracts but others while he was there. The country owes him a great deal for what he did at the risk of his personal health. There is no question about it. We have explained to the committee where we had gotten with his predecessors. We had not the matter entirely traded out with them. We told him about where we had reached. He gave us his ideas about the contract; what he thought the duties of people in our position were to the Government, with which we agreed. We told him that we would like to have his ideas of what he thought compensation ought to be here. He gave them to us and we accepted them, provided we could work out the proper form of contract, which we did, and I consider that it was very well worked out from the standpoint of the Government's interests, for while it is true that they put up all the money here, it is equally true that we can only stay there and spend that money for them as long as we perform the service properly, because under the contract, which is true of all of our own contracts that we make, the Government reserves the right to throw us off the job whenever they want to. They have entire control over the work in every particular and can direct it in every particular, as little or much as they see fit. They have had their representatives with us since the beginning. That is merely what we have in our ordinary contract in our business. Our fee contract contains a clause in which the owner preserves the right to throw us off the job upon 10 days' notice. He has not got to give any reason. We are spending his money.

The CHAIRMAN. Who was the Government's representative, M Robinson, from the start?

Mr. ROBINSON. Admiral Capps was the first man, and he divid the work into two sections, the yard work, under Admiral Rousse and the ship work, under Admiral Bowles. We went to the one the other of those two gentlemen, depending on what the matter w Admiral Bowles was represented locally by Mr. Ferguson, a broth of Homer Ferguson, of Newport News, an old Annapolis man, perienced in shipbuilding, and Admiral Rousseau was represen by Mr. Reed, of the Navy Establishment, a very high-minded capable gentleman. He had the interest of the Government fully heart and realized and understood that there was only one th which counted, which was speed.

The CHAIRMAN. Your contract was pending under the board existed when Gen. Goethals was there and Mr. Denman was ch man, was it not?

Mr. ROBINSON. Yes, sir.

The CHAIRMAN. It was pending then; and then Admiral Ca took it up when he came in?

Mr. ROBINSON. Admiral Capps took it up when he came in sent for us, as I explained, early in August, and the contract was traded out and finished on the 13th of September; and I think, co sidering the magnitude of the job and the amount of money to b expended, that that was not an undue amount of time to devote t it. I know personally that Admiral Capps stayed up at nights a late as 2 o'clock going over it, with a desire and effort to speed the thing along. The next day after the contract was signed we had men at work in Philadelphia establishing temporary offices there in one of the hotels until we could get a permanent office kicked int shape. We found space for offices in one of the automobile building which we got in shape for business.

Senator JONES. What was the estimated expenditure under thi contract?

Mr. ROBINSON. About $200,000,000, roughly; a little more tha that originally, but that is about what it was. The contract fir contemplated 200 boats.

The CHAIRMAN. The plant and ships were $200,000,000?

Mr. ROBINSON. Roughly that. The ships run about $175,000,0 and the plant $20,000,000—something of that sort.

We started in immediately clearing the place, getting topograph surveys and securing such information as we could about foundatio conditions and the requirements for foundations. We brought me from our organization to it as rapidly as we could, as rapidly as thei jobs were completed. We ceased to take on other work, except f some clients we had to do, and devoted all the energies of this organ zation to pushing the work along, and to date we have got at lea 400 men in the organization that have been working for us at on time or another in one part or another of the country.

Senator NELSON. Most of them are paid by the Government?

Mr. ROBINSON. They are all paid by the Government.

Senator NELSON. They are not your employees.

Mr. ROBINSON. For the time being, no, sir. But they are men have trained, and I know about their capabilities; they are accus tomed to working together and coordinating and working harmo

niously together, and in getting speed—that is what we have been trained in getting—speed.

Senator JOHNSON. How many did you say?

Mr. ROBINSON. To date I think we have in the neighborhood of 400 men of all sorts and kinds—bosses and timekeepers, superintendents, shopmen, and engineers and all sorts.

The CHAIRMAN. When you went there, Mr. Robinson, and took charge, who were the leading men immediately under you who actively gave their attention to the work?

Mr. ROBINSON. Mr. Connick, Mr. Muhlfeld, and I formed what was known as the executive committee, and the general direction and general harmonizing of the work lay with us. Mr. Goodenough was appointed general manager; he was our chief engineer in Boston.

Senator NELSON. He was on salary from the Government?

Mr. ROBINSON. He is now; yes, sir. Quite right, and we brought down other engineers from Boston and from some of our other work. Mr. Manning, Mr. Anthony—we brought in men that we knew about from other organizations, men we had run across in our experience, just the same as we brought in these contractors.

Senator NELSON. They were on the Government pay roll?

Mr. ROBINSON. Surely; quite right, sir.

The CHAIRMAN. Was that agreed on in advance?

Mr. ROBINSON. Strictly in accordance with the contract, Senator.

Senator NELSON. I would like to ask you right here, if the chairman is agreeable.

The CHAIRMAN. I think you have got to that point—about the employees.

Mr. ROBINSON. I was just going to touch on salaries.

Senator NELSON. No; I was going to ask you how many men of your organization have you had actively on the ground that have not been paid by the Government but paid by your company—that you have had there looking after the work of your own company. Give the number and the names of the men.

Mr. ROBINSON. I have been there for one.

Senator NELSON. Yes.

Mr. ROBINSON. Mr. Muhlfeld, Mr. Rogers, Mr. England.

Senator NELSON. England—what have been his duties?

Mr. ROBINSON. He has had charge and general oversight of the accounting, timekeeping.

Senator NELSON. He has been on your pay roll, not the Government's?

Mr. ROBINSON. That is my impression; yes.

Senator NELSON. Now, who else has been on your pay roll? Do not mix in anything we have been paying.

Mr. ROBINSON. I am not going to mix in anything. We had two or three other men there helping out that under the Government contract we could have put on the Government pay roll, and we have not put them on the Government pay roll.

Senator NELSON. What others have you had there on the ground that have been supervising the work that you paid and not the Government?

Mr. ROBINSON. Helping in the office I have had Mr. Allen, one of our men who has been with us a great maney years and who

Mr. ROBINSON. A number of them here.

Senator NELSON. That you brought from Boston or any other place?

Mr. ROBINSON. Mr. Goodenough is one. I do not know whether he is on this page. Mr. Manning is another. Here is Mr. Horton, and a number here. They are all listed, and we handed in a list; and, I think, this is the list here [indicating]. We stated whether they were Stone & Webster men, whether they worked for Stone & Webster, or where they came from. The information is all here. If it is not, I shall be glad to furnish it.

Senator NELSON. I see here, John Meigs, dredging engineer. Where did you get him from?

Mr. ROBINSON. He was in Philadelphia doing business there on his own account. He used to have to do with the docks and wharves, and things of that sort.

Senator NELSON. So he was not a part of the Stone & Webster organization. You just hired him like any other man for this job?

Mr. ROBINSON. We hired him particularly, Senator, because of his knowledge of the river conditions; and he has been working on the Delaware River for a great many years, and we felt we were particularly fortunate in being able to attach him to our staff, because we had to get a number of permits of one kind and another in connection with developing ways and changing walls, and matters of that kind.

Senator NELSON. He was getting $833.33 before?

Mr. ROBINSON. Yes.

Senator NELSON. But he was "fortunate" enough to get into the Government crib at $1,000 a month?

Mr. ROBINSON. Yes.

Senator NELSON. How do you account for that, and he was living there in Philadelphia, and was not brought there from the outside?

Mr. ROBINSON. All I can say about that, Senator, is that we had to pay him that to get his services, and we thought his services, on account of his special knowledge, were well worth what we paid him. That is all I can say about Meigs, which is the fact.

Senator NELSON. Here is Mr. Goodenough, general manager. He was getting $1,500 a month before, and now he gets, when he comes into the Government dump, $2,083.33 a month.

Mr. ROBINSON. Will you just let me touch on salaries as a whole, and I will tell you about Mr. Goodenough and one other man—there are just two salaries that I want particularly to speak about.

Senator NELSON. I am afraid you will do it in too much of a Billy Sunday style. [Laughter.]

Mr. ROBINSON. No; I will not. I will tell you exactly what it is. Have I been going that way? [Laughter.]

Senator JONES. And you would not get very far wrong, if you did. [Laughter.]

Mr. ROBINSON. I guess that is right. This matter of salaries I had noted here as one of the things I wanted to speak about. The only raises that we gave Stone & Webster men were the raises that we would have given them on the 1st day of January if they had remained in our employ on other work, and a great many of those men came onto the pay roll in November, and possibly some in December,

possibly some in October. We thought it was better to put them at what they would have gotten the 1st of January than to put the on at what they were getting, and then come around and raise the salaries after they went on the pay roll. We explained all that to the members of the Shipping Board. You understand this was all submitted to them.

Senator VARDAMAN. On that point, are you doing any other building—have you any other contracts now other than this one?

Mr. ROBINSON. Yes; we have some.

Senator VARDAMAN. Are you paying the same rate of wages on your other contracts that the Government is paying on this one?

Mr. ROBINSON. Yes; in fact, I think our scale of wages compares very favorably—I mean by that, Senator, when we have to go outside to hire men of equal ability, as we consider, to the men in our employ, we invariably have to pay more money than we pay our own men.

Senator VARDAMAN. Have you done that? Is the scale of wages in your other contracts, where you are doing work for yourselves, equal to the amount that you are paying these other men?

Mr. ROBINSON. Yes; absolutely so, Senator. In fact, we were succeeded on some of this work in Texas by another contractor on Government work.

Senator VARDAMAN. Have you made any private contracts with private concerns now?

Mr. ROBINSON. Yes; we have some.

Senator VARDAMAN. And you are paying those men the same wages?

Mr. ROBINSON. Absolutely the same.

Senator VARDAMAN. I wish you would state the contracts that you have in which that is the case; name them?

Mr. ROBINSON. We are still doing work, I think, for the New Bedford Gas & Electric Light Co., of New Bedford, Mass.; the Buffalo General Electric Co., of Buffalo; the Republic Railway & Light Co. of Youngstown; Youngstown Sheet & Tube Co.; Carnegie Steel Co. and a number of others—I have not got them all in my mind. Showing what has been our practice, I have here just some copies of records we keep of different men, showing how long they have been in our employ and the raises they have had while in our employ.

Senator FERNALD. Just a question right there, Mr. Robinson. You are quite familiar with the wages at which you have been hiring men for many years?

Mr. ROBINSON. Yes, sir.

Senator FERNALD. Is the increase in the rate of wages greater in this yard than on other work you are doing?

Mr. ROBINSON. None whatever. There are just two particular salaries I want to speak about which might look as though we had made greater raises there than we had in the others. One of those is Mr. Walter Goodenough. You see, I am back to him now, Senator. We felt while he was only getting $1,500 a month——

Senator NELSON. I want to say to you and caution you that to us poor fellows who live back in the country, our rural taxpayers who have got to pay taxes and buy liberty bonds, these salaries look awfully big, and it is your duty as a missionary to get that idea out of our heads, if you can.

Mr. ROBINSON. I will say this about that, Senator: Twenty-five years ago they looked big to me. I started in at $5 a week, and I think that I have appreciated what small salaries are and various rates of salaries. We have employed the men here just as cheaply as we could get them, Senator. We have used the same degree of honesty, integrity, and care in doing this work as we would have done if we had been spending our own money, and as we do every day in spending other people's money.

Senator NELSON. Have you done any fabricating as yet?

Mr. ROBINSON. Yes, sir.

Senator NELSON. Where?

Mr. ROBINSON. We have 90 per cent of the steel placed for the first 25 boats and some of it on the ground going in place. I do not know just how many cars. Some of our other people will tell you better about that.

Senator NELSON. I am coming to that later.

Mr. ROBINSON. To come back to Mr. Goodenough again. He has been getting $1,500, it says here, and we felt that the job of general manager, with the responsibilities that went with that undertaking, that anybody who went into that thing and worked as a man would have to work, without regard to himself or hours or anything else, who could fill the position, was well worth $25,000 a year. We so told the Shipping Board, and with their approval we made the salary of the general manager $25,000. I want to say that in addition to that we are paying him—that is, Stone & Webster—$5,000 a year ourselves.

Senator NELSON. You also get some work out of him for other things than Hog Island?

Mr. ROBINSON. Excuse me, but that is not so. He is putting in all his time there. He is living in Philadelphia and he is working on the job.

Senator HARDING. That is a thing you ought to clear up. It has been said many of these high-priced men on the Government pay roll, under your direction, are engaged part of their time on other enterprises.

Mr. ROBINSON. That is not so. We have had men who have come on intermittently for a day or two or a week to advise on special needs, and they have not gone onto the Government pay roll.

Senator HARDING. At no time?

Mr. ROBINSON. They have been billed to the Government at a rate approved by the Shipping Board, but they have never gone onto the Government pay roll as such; and, of the men who are on the Government pay roll that I know of, none are there except those who have been devoting all of their time in very large measure to the work. They do not know when the day begins and ends, so far as my observation is concerned; and I think that that is borne out by the Shipping Board representatives who have been living right side by side with them all these months.

Of course, we have had to get in men from other organizations. A great many men have come and offered their services at sacrifices. I have not heard any comment made by anybody about some few men on this job at less wages than before they came.

The CHAIRMAN. What has been Mr. Goodenough's experience?

Mr. ROBINSON. Mr. Goodenough has been with us fully 10 year He came with us as steam engineer in connection with power-stati designing, and during that time has gone out and taken charge important work. We had a serious fire in Minneapolis, whi burned down our power station there. Mr. Goodenough was sen out there, and we gave him an organization, and that organizatio designed, developed, and built right there on the ground a bran new station, and had it running, in seven months, because the company needed the power. He went from there to Keokuk, Iowa, in connection with the Mississippi River Power Co. He had charge there of all the electrical work. We were doing that work in connection with Hugh Cooper, who did the hydraulic end of the power station. We did the electrical work and all the transmission work to St. Louis, which, I think, is something like 130 miles.

Senator JONES. He has been with you 10 years on a regular salary

Mr. ROBINSON. Except when on a job he goes on the job roll, an then, when the job is completed, he goes on our roll when he come back to Boston, just as he is now off of our roll and onto the Govern ment roll. When he was at Minneapolis he was on the Minneapoli roll.

Senator VARDAMAN. How much more is he getting than what yo paid him, Mr. Robinson?

Mr. ROBINSON. I think we paid about $18,000 a year. I do no know whether it says here [referring to printed record of hearings

Senator VARDAMAN. Do you know what increases you have mad from time to time in his salary?

Mr. ROBINSON. I do not know whether I have the salary list her or not. I can easily get it if I have not [producing cards before th committee]. There [indicating] is his record since he has been wit us. He started in with us in 1906 at $5,000 a year, and stayed a that salary for three years—1906, 1907, and 1908 were not ver joyful years with many of us. In 1909 he was raised to $5,400; i 1910, $5,700; in 1911, to $6,000; in 1912, to $7,500; and 1913, to $8,00

Senator NELSON. I suppose the gold inflation had something to d with raising his salary.

Mr. ROBINSON. We tried to pay the men what they are worth what they can do for us. In 1916 his salary was raised to $833.3 a month—that would be $10,000 a year—and in that time he has als had some interest in the earnings of the firm. We have certain o our men who, in addition to their fixed salaries, have a varyin salary, depending on what we earn. We give them an incentive t be interested in what we earn.

Senator JOHNSON. May I see the card, if you have no objection

Mr. ROBINSON. Certainly [handing card to Senator Johnson].

Senator JONES. You do not know when he has been paid at the rat of $18,000?

Mr. ROBINSON. Well, with his salary and his contingent, that i what he earned last year with us—$18,000.

Senator JONES. What was he working on with you last year?

Mr. ROBINSON. As chief engineer in the Boston office, where h has charge as such—of all the engineering work on all the project handled by the Boston office.

Senator VARDAMAN. Has he still the interest that made his salar $18,000?

Mr. ROBINSON. We are paying him $5,000 in addition to what the Government is paying him.

Senator VARDAMAN. The Government is paying him $25,000?

Mr. ROBINSON. Yes.

Senator JONES. What was the character of the interest that gave him $8,000 increase?

Mr. ROBINSON. Not $8,000. He was on at $1,000 a month, I think, which would be $12,000 a year.

Senator JONES. I understood you to say he was getting $1,500 a month before he took this Government proposition.

Mr. ROBINSON. I think last year he was getting $18,000 a year.

Senator JOHNSON. How long has he had that interest, please?

Mr. ROBINSON. I can not say out of hand.

Senator JOHNSON. Some years?

Mr. ROBINSON. Yes, sir.

Senator JOHNSON. And the interest continues—that is, the $5,000—that is what you paid him this year as part of that?

Mr. ROBINSON. We have continued that interest on in order that he may feel attached to our organization.

Senator JOHNSON. That is, then, you are not paying him a salary of $1,500 a month.

Mr. ROBINSON. No, we were not; and to that extent this classification of previous salary is in error. The heading should be "previous earnings," and that will come up in one other case.

Senator JOHNSON. So that the amount should not be stated "previous salary, $1,500."

Mr. ROBINSON. That is not so. We speak of contingent salary.

Senator JOHNSON. The contingent salary continues just the same—that part that is contingent to be added to the $25,000, just exactly the same to the one as to the other.

Mr. ROBINSON. I am comparing what we paid him last year with what the Government pays him this year.

Senator JOHNSON. There is a difference on the one you do not make upon the other, and so far as salary is concerned the salary he was receiving the time he went upon the Government pay roll, $1,000, and the salary after he went upon the Government pay roll was $25,000 a year.

Mr. ROBINSON. His fixed salary—you might say his total salary—is in the neighborhood of $30,000, as compared with $18,000.

Senator JOHNSON. You mean eliminating the excess in each instance and then the fixed salary is exactly $1,000 a month, against $2,083.33 per month?

Mr. ROBINSON. We felt if we continue that contingent salary it certainly ought not to be charged up against us, because it is in addition to what the Government pays, and keeps the men attached to the organization.

Senator JONES. Why did you reduce that contingent salary $1,000?

Mr. ROBINSON. That is more or less of an estimate. We do not figure that way. That depends on the earnings of the organization, and it varies from year to year; it is not a fixed amount; what we call "contingent."

Senator JONES. I thought you were paying him a definite sum this year of $5,000?

Mr. ROBINSON. We expect that is what we shall pay him this year.

Senator JONES. It may be more?

Mr. ROBINSON. It may be more; we do not expect it will be any less; in fact, it shall not be less. It may be more, but I doubt it.

Senator VARDAMAN. Let me understand that. Excluding the interest he receives from the business, you were paying him $1,000 a month, or $12,000 a year, when he went on the Government pay roll?

Mr. ROBINSON. That is right.

Senator VARDAMAN. You doubled that; you gave him a little bit more than that. The Government now pays him $25,000 a year. Do you intend the committee shall understand it was your purpose to increase his salary that much if he had not gone onto this Government employ?

Mr. ROBINSON. No; because he would not have had the responsibilities nor anything like the strain on himself.

Senator VARDAMAN. What was it you said a moment ago about raising his salary?

Mr. ROBINSON. I said there were just two salaries I wanted to speak about which I thought would be outside of that statement.

Senator JOHNSON. You may have been in error in the statement, but I want to call your attention to it, so you may make the correction if you desire: Did you not say the increase in salary was given because you were going to give that increase in salary on the 1st day of January?

Mr. ROBINSON. I meant to have said—I did say there were two salaries I particularly wanted to speak about.

Senator JOHNSON. Did you not, in addition to that, say you increased Mr. Goodenough's salary, and you increased it because you were going to give him that increase in salary on the 1st day of January?

Mr. ROBINSON. If I did, I want to correct the record, because it was not my intention.

Senator JOHNSON. I wanted to give you the opportunity to make the correction.

Mr. ROBINSON. My statement applies to Mr. Goodenough and to Maj. Hamilton, about whom I want to speak now.

Senator NELSON. Mr. Robinson, in connection with that salary matter, I want to call your attention to one paragraph, the last part of the letter that I got from the president of the First National Bank of Fergus Falls, Minn.—Robert Adams, a Vermonter by birth. Here is what he says.

(The part of the letter read by Senator Nelson was subsequently finished by him, and is here printed in full, as follows:)

We are trying to sell thrift stamps to our people, and these big salaries you have been paying and the way you are operating makes it awful hard work for us. We want to help; we are patriotic; but what you are doing is putting obstacles in our way in two directions: First, the people who are patriotic, and, second, the other people who are not patriotic, they use it, and I think you ought to help us reduce salaries instead of increasing them.

Mr. ROBINSON. Of course, Senator, what we are really trying to do is to get the work done quickly, and that is the only way we know how to do it.

Senator VARDAMAN. And you know that you could not get that man Goodenough unless you doubled his salary?

Mr. ROBINSON. Yes; he would have gone onto the work, undoubtedly, but I think, under the circumstances, we were perfectly justified in paying the salary. That is the way it appealed to the Shipping Board, because the man who takes that position for the next two years is going to put about 10 years of his life into the job.

Senator VARDAMAN. Mr. Robinson, we are all doing that.

Mr. ROBINSON. I am doing that; I do not get an increase in salary.

Senator VARDAMAN. I know; but you are giving these increased salaries. I understood you to say a moment ago that the purpose of this organization was largely patriotic, and it seems that you are the only one, or a few of you in the company are the only ones who are moved by that patriotic impulse. Everybody else was paid more than they ever got before, that anybody else ever heard of. I agree with Senator Nelson that the moral effect upon the American people is not very satisfactory.

Mr. ROBINSON. All I can say on that, Senator, is that we felt it was due Mr. Goodenough. We may have been in error in feeling that way about it.

Senator VARDAMAN. I think you reflect on Mr. Goodenough's patriotism when you say you had to buy him.

Mr. ROBINSON. I will say this, Senator Vardaman, he was not consulted, so his patriotism does not come into question.

Senator JONES. He did not ask for any increase?

Mr. ROBINSON. He did not.

Senator JONES. Was he conferred with about going over and taking charge of this work before you arranged with the Shipping Board as to what his salary should be?

Mr. ROBINSON. He has been expecting and hoping to be put on this work, as did everyone in our employ who possibly could get on it. They wanted to get on it.

Senator JONES. He was anxious to get on it and did not ask any increase?

Mr. ROBINSON. None whatever, and he certainly was anxious to get on the work. If there is any embarrassment due to his salary being raised I am responsible for it.

Senator JOHNSON. I was going to ask that question. Who specifically fixed the salary?

Mr. ROBINSON. That salary I fixed in consultation with, and with the approval of, the Shipping Board.

Senator JOHNSON. Was it your intention to give him that salary on the 1st day of January?

Mr. ROBINSON. I do not think we would have done that—no; we would not have increased his salary to that extent. I think I am correct in saying that.

In the case of Maj. Hamilton——

The CHAIRMAN (interposing). You said, Mr. Robinson, that you did that in consultation with the Shipping Board. What do you mean by that?

Mr. ROBINSON. First of all, we conferred with them as to what they thought.

The CHAIRMAN. Who do you mean by the "Shipping Board"?

Mr. ROBINSON. I conferred with Admiral Capps, who was at that time general manager, as to what was in his opinion the proper

salary for a Government employee in that position under those conditions at that time.

The CHAIRMAN. You did not take it up with the whole Shipping Board?

Mr. ROBINSON. Oh, not the Shipping Board—when I said the Shipping Board I always meant the Emergency Fleet Corporation, because we have no relations with the Shipping Board except that Mr. Hurley is the chairman of one and president of the other; and that salary as it appeared on the pay roll, on the salary list, has twice been approved, once by Admiral Bowles and subsequently approved by Admiral Capps when he was there, and in January the salaries were resubmitted, and again approved by Admiral Bowles, and this time by Mr. Piez, vice president and general manager, so that those gentlemen seemed to concur in our judgment in the matter.

The CHAIRMAN. Now, as to Mr. Hamilton.

Mr. ROBINSON. In the case of Maj. Hamilton, he has been with us a great many years. He has been our general purchasing agent for six or eight years. He has been in the purchasing department a good many years. He was attached to what is known as the First Corps of Cadets in Boston. When the war broke out he went in the service, and shortly after then this cantonment division of the Quartermaster's Department was formed and he was detailed and handled all of the purchasing work for the Government, in connection with the cantonments and for the National Guard camps in the most effective and efficient manner, and his experience and acquaintance with official Washington and the knowledge he had gained here we felt peculiarly fitted him for managing the purchases of this job.

Senator JONES. Let me understand. Was he in the Army?

Mr. ROBINSON. He was in the Army.

Senator JONES. What was his rank?

Mr. ROBINSON. Major.

Senator JONES. He was in the Army and doing all that work for the Government at a major's salary?

Mr. ROBINSON. At a major's salary. We discussed the matter with Admiral Capps about seeing if we could arrange to have him transferred, if he were willing. We discussed the matter with him, and while he was not at all anxious to leave the Government service because he really wanted to get to France and rejoin his corps there—the First Corps of Cadets having been turned into an engineer regiment and had been in France for some time—we pointed out the need to him, the need we had of him, and thought he could perform a greater service for the Government in that capacity than in the other, and we succeeded in getting his consent to be transferred, which we arranged through Admiral Capps, and we fixed his salary at $12,000 a year, because we would have had to pay that, at least, if not more, to an equally capable purchasing man outside, not having the advantage of his experience and knowledge of our organization and ability quickly to get in and work with us.

Senator JONES. Did he get a discharge from the Army?

Mr. ROBINSON. No; on inactive duty.

Senator JONES. He is still in the Army?

Mr. ROBINSON. He is still in the Army.

Senator JONES. Is he on furlough or has he been put on the retired list?

Mr. ROBINSON. He is on what I understand to be inactive duty; he is subject to call at any time.

Senator VARDAMAN. Is he drawing any salary from the Government other than that?

Mr. ROBINSON. I think not.

Senator JOHNSON. How long, if you please, has he been on inactive duty?

Mr. ROBINSO. Since he was transferred from the cantonment division to the Hog Island work.

Senator JOHNSON. Was he on active duty as an officer of the United States Army until his transfer to Hog Island?

Mr. ROBINSON. Yes; as purchasing manager of the cantonment division.

Senator NELSON. This book says he was engaged by Stone & Webster before he came; on page 1450, in the lower part of the page.

The CHAIRMAN. Thirteen years—Stone & Webster—general purchasing agent since 1910.

Mr. ROBINSON. Yes, sir; that was before the country went to war. He was with us at the time the country went into war, and then went with his regiment. He was in the First Corps of Cadets in Boston, and has been for a great many years.

Senator VARDAMAN. He is not a member of the Regular Army?

Mr. ROBINSON. No; I say of the National Guard.

Senator JONES. But he had been in your employ 13 years before the war broke out?

Mr. ROBINSON. Oh, yes; he had been our general purchasing agent there for a number of years.

The CHAIRMAN. What are his duties?

Mr. ROBINSON. He has general charge of all purchases, the purchase contracts, and of all the buying, and he has had charge of the expediting of material and, in general, seeing that material comes to us, and that sort of thing; a very important position.

The CHAIRMAN. The purchasing of all the supplies?

Mr. ROBINSON. He has, of course, a large organization under him.

The CHAIRMAN. And he has a number of assistants?

Mr. ROBINSON. Oh, yes; he has an organization.

Senator NELSON. And I see on the same page, "Noonan, head buyer, steel products, $300 a month plus," and then "Stapleton, head commissary buyer," and then "assistants"—oh, there are any number of buyers there under Maj. Hamilton.

Mr. ROBINSON. We necessarily have a very large purchasing corps.

Senator NELSON. "Herbert Fryer, buyer, $333 a month; chief clerk, $200; head buyer, miscellaneous, $250," and so on. He has a whole corps there with pretty good salaries?

Mr. ROBINSON. And they are handling a lot of money.

Senator NELSON. You seem to be "delighted" with these big salaries, to use a phrase of Mr. Roosevelt.

Mr. ROBINSON. It is not the salaries, Senator, we look at; it is the performance we have been trying to get.

Senator NELSON. I suppose you call it "oiling the machine"?

Mr. ROBINSON. No; we do not; we call it trying to get competent help.

Senator HARDING. I wanted to ask you are these contracts all O. K'd by the Fleet Corporation authorities?

Mr. ROBINSON. They are O. K'd and approved by them before they are entered into, Senator. The form was originally submitted to them for approval, then the individual contract drawn up and submitted to them for the individual approval of that contract before we signed it.

Senator HARDING. So that any individual contract for material which your purchasing department has made must have the sanction of the Government agents before it becomes effective?

Mr. ROBINSON. Except some minor purchases in lumber, and even those we have to get approval of before they reimburse us for them. And all the purchase contracts are submitted for their approval before they are made. In addition to that, they are not paid for except by checks countersigned by the Government's representatives. So they approve the contract and expenditure under it.

Senator VARDAMAN. Did you ever have any controversy with Mr. Towle, one of the engineers, about the methods and prices, etc., and things of that kind you were pursuing?

Mr. ROBINSON. I do not know that you would call it "controversy." We had some differences of opinion.

Senator VARDAMAN. Did he ever protest about what was being done?

Mr. ROBINSON. He had some different ideas at times about the conduct of the work from what we had, and in those cases the matters were always submitted to his superior and adjusted with his superior officer.

Senator VARDAMAN. Was he ever told by you that you had the contract to do this work, and that you were not subject to his direction or compelled in any way to take his advice or judgment?

Mr. ROBINSON. I can not say that I ever told him that. I may have intimated to him that unless his superior officer approved of his suggestions that we were not obligated to accept them. He was one of the inspectors at the yard there, and naturally operated through his superior officer.

Senator VARDAMAN. I suppose you read his testimony.

Mr. ROBINSON. Yes; I did, Senator; with a great deal of interest.

The CHAIRMAN. Was Mr. Thomas Young employed by Maj. Hamilton?

Mr. ROBINSON. I could not say offhand.

The CHAIRMAN. Do you remember where the purchases of steel were made largely?

Mr. ROBINSON. The purchases of steel are made through Washington. We submit all our requirements here. They go to the priority board, and from there, as I understand it, to the steel institute, which allocates them, as it is termed, places them with this mill and that mill and the other mill at the Government prices, and then we are notified where they are placed, and then we place orders where we are told to place them; that is the procedure on steel purchasing.

Senator NELSON. The contracts are made by the Government, not with your company?

Mr. ROBINSON. I think by us as agents for the Government; practically by the Government; yes, Senator.

The CHAIRMAN. You do not place contracts independently of your own motion, to begin with?

Mr. ROBINSON. Oh, my, no; none of that. I should say offhand that 90 per cent of the material that has come to the yard to date has been placed here by the Fleet Corporation's purchasing department in Washington, all the piling, all the timber, and other things, except such as we bought locally there for emergency use.

The CHAIRMAN. Have you any knowledge about a portion of the steel being ordered from the Illinois Steel Co.?

Mr. ROBINSON. I know some has been ordered there and some from the Inland Steel, and some other plants out there, because they had the capacity, I presume. That is all allocated and because it was near by some of the places where the steel was to be fabricated.

The CHAIRMAN. That was not left to you; that was the work done by the Fleet Corporation?

Mr. ROBINSON. We got bids from the different fabricators for fabricating this steel, picked out the low bidders, the ones we thought we would like to place the contracts with, and then I think the steel institute placed the orders with the mills that were as near by the fabricaing plants as possible, to cut down the amount of the railroad haul. That is my understanding.

The CHAIRMAN. There are a good many mills closer by Hog Island than the Illinois Steel Co.'s plant.

Mr. ROBINSON. Yes; but at that time the fabricating plants near by were loaded up, and their prices were very much higher for doing the work, so that our steel landed at Hog Island cost us, I should say, at least, offhand, some $5 a ton less than if we had placed it with some of these fabricators near the Eastern mills.

Senator NELSON. Fabricated steel?

Mr. ROBINSON. Yes, Senator. I think a good degree of intelligence was used in handling that, and some of that western steel is steel that we are getting the most promptly.

Senator JONES. You intend to take up the matter of car congestion?

Mr. ROBINSON. No; I had not touched on that. All I can say is that it was our idea to have material waiting on us rather than having the men waiting on material.

Senator JONES. It occurred to me from what you just said that you had very little to do with ordering the supplies.

Mr. ROBINSON. We gave them our requirements in the gross, so many piles at about a certain rate, the same with timber, etc. We all work together on that, you know.

Senator NELSON. That has relieved you of a good deal of the burdens, to have the Government order all the materials?

Mr. ROBINSON. No; it has added to our burdens. We have had to keep track of what was done and see where our orders have been sent, and sometimes we have got the material in before we knew where they had placed the orders, and it has not been entirely clear sailing.

Senator NELSON. It does not bother you what they paid for it, because it does not come out of your pocket?

Mr. ROBINSON. We have an indirect interest there. Nobody seems to realize that. It has been stated—I think I have seen it in writing—that we have no incentive whatever in keeping down the cost of this work. It is not true. I do not think we have considered that,

as has been pointed out, very prominently, because the only thing we have been interested in was the getting this thing done, because I think that it is the only thing the country is interested in. I think that is what the country needs and what we are working for. But here is the interest that does exist, and I would like to point it out: At the end of this work the Government has an option to take our land. If they do not see fit to take our land——

Senator NELSON. At the cost price?

Mr. ROBINSON. At what we paid for it; yes, sir. If the Government does not see fit to take our land, we have the option to take their property at appraised valuation. Now, it is reasonable to suppose that we could get $20,000,000 for less money than $40,000,000.

Senator NELSON. It depends on what the appraisal will be.

Mr. ROBINSON. We do not make that.

Senator NELSON. When the war is over and this boom and inflation has subsided you will undoubtedly get that yard for probably half what it cost the Government.

Mr. ROBINSON. Yes.

Senator NELSON. And it will be appraised at half?

Mr. ROBINSON. Yes. But if it cost $50,000,000 we would get it for $25,000,000; if it cost $20,000,000 we would get it for $10,000,000. Do you not see the interest we have in keeping down the cost?

Senator NELSON. I do not know precisely what your interest in keeping it down would be.

Mr. ROBINSON. No; I am basing my statement, by and large, on 50 per cent of its cost.

Senator JOHNSON. How is the appraisal to be made?

Mr. ROBINSON. I do not recall. I think we put on one appraiser, the Government one, and they choose a third one.

Senator JOHNSON. And the estimate of value is what—the appraised estimate?

Mr. ROBINSON. I think the estimate of the value was the shipyard. That is set forth in the contract.

Senator JOHNSON. The appraisement to be made at the time, the value then, is it not?

Mr. ROBINSON. I do not know just how it is worded, but, as I recollect, the intent in working out the contract——

Senator VARDAMAN (interposing). The Government has the option of taking it over at the price you paid for the land?

Mr. ROBINSON. Yes; they have the option at about $1,703,000; and, then, since beginning, we bought a right-of-way strip costing $20,000 more to get transportation in.

Senator JONES. Mr. Robinson, you read Mr. Towles's testimony about the car congestion, did you not?

Mr. ROBINSON. Yes.

Senator JONES. What have you to say about the car congestion? My recollection is that he said 1,300 cars were in there at one time, with 3,000 cars on the way that had to be stopped.

Mr. ROBINSON. About that time we analyzed the average length of time it took a car to reach us. We were getting some derrick timbers from the Pacific coast and a lot of stuff from the South; stuff also from near by. The average haul was about 22 days, as near as we could analyze it. We were unloading cars then at the rate

I think—one day it reached as high as 200 cars a day. If we could maintain that rate of unloading right along we ought to have had 4,400 cars rolling toward us 200 times 22 days. We did have congestion, for two reasons: One reason was—we did not make very much holler about it—because down below here the railroads could only put cars into us at the rate of about 100 a day, and that did not enable us to develop facilities as rapidly as we had expected. We did not holler and we did not make any fuss about the railroads, because the leading local people were doing their very utmost to better conditions—to change connections. The Pennsylvania put in a connection that they would not have done under any other conditions—a railroad switch on the north-bound passenger track, which would enable them to bring cars in to us by the trainload. The Reading we helped by furnishing material and men to enable them to double track. Those things were going on, I should say, partly because of the railroads' fault.

We could not get the material to extend facilities as quickly as desired, and we got an embargo. But at the same time we had a surplus of material other people were hollering because they could not get material. I think we were in better condition, and I think we used good judgment in getting in that position, because you could not do work without material. I think reasonable efforts were used to get materials, but piles came in of all kinds and lengths. We might want long piles here and short ones there. A lot of lumber came in in box cars, and different kinds of material. Some were wanted down here [illustrating], and we would get the lumber we wanted over here [illustrating]. That was to be expected as the usual difficulties of the job.

Senator JONES. But you think it was better to take the risk of having the congestion you did have than to suffer from lack of material?

Mr. ROBINSON. We got out from under it. I know the railroads all over the country have been using Hog Island as a horrible example. You would have thought we had every siding, east, south, and west, loaded up with our cars. It was not so. We could not have made the progress we made if we had not had the material. Our trouble has been lack of material, and it was only a matter of two or three or four weeks, as I understand it, when we were out from under that condition, and the last five or six weeks we have been able to take care of cars as fast as the railroads could put them to us.

Senator JONES. Have you been delayed the last month or six weeks for lack of material?

Mr. ROBINSON. Some material for derrick towers. We would have liked to have had it and put that work behind us. It laid 15 days in Pittsburgh. So there are two sides to that.

Senator JONES. That is what I wanted to bring out. I wanted to give you an opportunity to explain that.

Mr. ROBINSON. I had not touched on that, because I thought that had been thrashed out before. This really is a big job.

The CHAIRMAN. Before we pass from that I want to ask you one or two things which are not quite clear to me. For instance, you have a man employed as superintendent of ship assembly at $1,000 a month?

Mr. ROBINSON. Yes, sir.

The CHAIRMAN. You have one employed as manufacturing man ager of ship construction at $1,250?

Mr. ROBINSON. Yes, sir.

Senator NELSON. You have not had any assembling?

Mr. ROBINSON. We had one boat building.

The CHAIRMAN. Manager of hull fabrication, $1,250 a month; manager machinery fabrication, $1,250 a month. You were not ready to build hulls or put in this machinery or assemble the ships. Why should these men have gone on the pay roll as early as they did?

Mr. ROBINSON. It took time to get them. We were not always sure of getting the men we wanted. It took a good deal of negotiation, and a lot of those men have been actively used in other ways.

The CHAIRMAN. They are employed for some specific duty, which, apparently, you had not reached?

Mr. ROBINSON. If you will let me pass that up to Mr. Goodenough, he can tell you more about it than I can, because he is familiar with how he has been using those men in constructing buildings, steel work and towers, and in laying out and mapping out the plant. They have not been idle. We wanted to get them and know what we would get and get things molded together.

To my mind, as I started to say, while this is a tremendous big undertaking its elements are simple. The thing that worried me most about the project was properly manning it for building the ships. That we discussed with the Shipping Board and everybody else. We were assured by them we did not need to worry about that They had been establishing schools. We have a school—to train men The Government is taking it up. The Department of Labor has department that is trying to assemble men, and we are doing every thing we can. The Government is doing it, the Shipping Board everybody, I think, is working intelligently. But back of that all have had just this feeling: That if we had this yard here—with th material coming in, and the need for ships is as great as it is to-da and will continue for some time—this country is not going to fa down on furnishing the men. I do not believe and I do not thin you have got to raise up any force of public opinion to do it eithe I think all the men in the country have got to have is a realizing sen of what the need is. That is what our publicity department wa for—to try and get an intelligent idea throughout the country as t the need of the country and where men could go to help fill it.

Senator VARDAMAN. You mean the purpose of that publicity burea was to create sentiment in favor of shipbuilding?

Mr. ROBINSON. Yes, sir.

Senator VARDAMAN. And the necessity for expeditious work?

Mr. ROBINSON. We had nothing to promote. We were nothing bu a little bit of a $2,000 outfit that were trying to do this work.

Senator VARDAMAN. You, in your enterprise up there, have sai you wanted this publicity in order to advertise and bring people lot of work.

Mr. ROBINSON. Is not that the same thing—educating in favor c shipbuilding?

Senator VARDAMAN. Oh, no. The people go there to get big sal aries. There is no patriotism displayed or manifested in the matte of working for nothing or working for fair salaries. Everybod

has been paid excessive salaries. I wanted to ask you if you thought that if the Government of the United States, through the expert shipbuilding department of the Government, had advertised they wanted and needed these men and would pay these exorbitant and unusual salaries that the Government could have gotten them. Do you think they would have come to work for the Government or do you think they came solely because your firm and Mr. Stone and Mr. Webster and others were connected with it?

Mr. ROBINSON. Why, Senator, perhaps the best answer I can make to that is that we have had scores of men leave our employ and enlist. It was not a matter of salaries; they wanted to help their country.

Senator VARDAMAN. Mr. Robinson, you have not anybody engaging in this work who did not want as high and as big a salary as they could get, and where they did not ask for high salaries, if they were men especially well qualified, you raised the salaries without permitting them to show any sort of patriotic desire to serve their country?

Mr. ROBINSON. I do not know, of course, what they have done with their money. We have merely paid them what we thought we were reasonably justified in doing, and we honestly looked at it that way. I have had these salaries criticized from a different angle, criticized the other day by a man who said the only criticism he had of the salaries was that they were too low for the responsibilities the men carried.

Senator VARDAMAN. Where is that man; I would like to look at him.

Mr. ROBINSON. That is a man engaged in construction and knows what he has to pay to get men to do certain work.

Senator VARDAMAN. Does he have to pay any salaries like these?

Mr. ROBINSON. I judge from what he said he does.

Senator VARDAMAN. Do you know anybody who pays salaries like these? You have never done it before, and you have had very large experience?

Mr. ROBINSON. Here is the record of what we have been doing. Here are other instances of how we have raised salaries right along.

Senator VARDAMAN. You take the list, and you say some are lower than they received before they came. I dare say that 98 per cent of these salaries have been increased from 50 to 100 per cent.

Mr. ROBINSON. Of course, there are just two classes of men there selected, Senator. One class have been with us a long time, and the other class we have had to reach out and get. What the men were getting before they came that we had to reach out to get is something I have never had any control of. But we have had to pay the men what was necessary to get them.

Senator VARDAMAN. There is no difference in the salaries of the men you have and the men you reached out to get?

Mr. ROBINSON. We have raised the salaries of our own men to the extent we would have raised them had they remained on other work on the 1st of January, with the exception of Mr. Goodenough and possibly with the exception of Maj. Hamilton.

Senator VARDAMAN. What per cent of this list were working for you before you started?

Mr. ROBINSON. I can not say offhand. I think every one enumerated, and my only regret is that there are not more Stone & Webster men in here, because they are the ones who leavened the whole bunch and helped to get the organization to working together harmoniously.

Senator VARDAMAN. Where Stone & Webster loaned a man to the Government he should be paid an increase of about 100 per cent for his services, where you have an expert man, and he comes to do the work for this company, he must be paid an increase of about 100 per cent?

Mr. ROBINSON. He is not paid that, Senator Vardaman. We have had men down there for a week or two or perhaps a month or a few days——

Senator VARDAMAN (interposing). Is there not something of that kind in the contract that they were to be paid on that basis?

Mr. ROBINSON. I was trying to answer your question, Senator. We have had these men come down from the Boston office and they have been billed to the job by Stone & Webster at cost, as near as we could figure it out. Our cost over a term of years is twice what we pay our men, on account of unproductive time, overhead expenses rent, light, stenographers, purchasing department, and other things that are not charged up to anything. So that the cost of carrying a man to me, as a partner of Stone & Webster, is twice what we pay him. So that while it might appear we charged these men at double salaries to the Government, Stone & Webster, who made the charge thought that they were doing the right thing in billing them to the Government at actual cost as closely as they could figure. That is the answer to that.

Senator VARDAMAN. I can not see how it costs Stone & Webster that, because the Government pays all the traveling expenses, pays all the expenses of going to and from the work, pays the expenses that they may incur while they are there, and I do not see how Stone & Webster have figured it or calculated it.

Mr. ROBINSON. I think I could demonstrate that to you or to any other fair-manded man by submitting a matter of record over a term of years, by showing what our costs are here and there and elsewhere. I think it is a well-known fact in any organization that overhead is practically equal to the pay roll. In fact, in this contract of ours the overhead on ships is pretty nearly equal to the pay roll.

Senator VARDAMAN. Have you seen the resolution adopted by this committee:

Resolved further, That the committee recommend to the Emergency Fleet Corporation that a complete revision of the compensation and number of the "overhead employees" of the American International Shipbuilding Corporation be made at once, and that a reduction in both the number of such employees and the amount of compensation be ordered, such revision to be reported to the committee.

Resolved further, That all contracts and purchases made by the American International Shipbuilding Corporation be reexamined and scrutinized, and prices and sums and purposes noted and checked and reported on.

Have you seen that?

Mr. ROBINSON. No; I have not.

Senator VARDAMAN. Have you conferred with Admiral Bowles?

Mr. ROBINSON. I have understood, in a general way, that some such resolution was passed with reference to salaries.

Senator VARDAMAN. If Admiral Bowles has reduced these salaries to the amount of $250,000 or $275,000 a year, you do not know it?

Mr. ROBINSON. No; but I think I should.

Senator VARDAMAN. If Admiral Bowles says he has done that, he has done it?

Mr. ROBINSON. I should think he has, if he says so.

Senator JONES. Has he authority to do that as long as you act as the agent of the Government and the Shipping Board?

Mr. ROBINSON. I think so, Senator. I have not looked into that recently, but, Senator, I have always worked under the idea that this was an agency contract. It was the owner's money, and he could direct to any extent he wanted its expenditure, and if Admiral Bowles or you gentlemen think that is the thing to do, if that is going to help get ships, if that is going to put enthusiasm into the corps and speed things up, all I can say is that in a great many instances we shall absorb the difference, because we think the men are entitled to it, and as long as they stay on the job they ought to have it.

Senator NELSON. Do you not think, Mr. Robinson, that these excessive salaries tend to dull the spirit of patriotism in men? They are reducing patriotism to a matter of dollars and cents, are they not?

Mr. ROBINSON. I do not think so, Senator; no. I quite strongly think the contrary. I have not seen any evidence of any lack of patriotism on this job.

Senator RANSDELL. Mr. Robinson, did not I understand you to say that you are paying on this Hog Island contract substantially the same salaries that you are paying in a number of other kinds of work that your firm is conducting?

Mr. ROBINSON. Absolutely so; yes, sir.

Senator RANSDELL. Is it not a fact that all kinds of wage earners—if these high-class men can be called wage earners—are now receiving very much larger salaries than they did prior to this war, even beginning with common labor?

Mr. ROBINSON. Common labor with us has been earning $3.85 per day up there. Under the new wage scale that has gone into effect in the shipbuilding crafts, I understand there are a great many men—I am not familiar with the details of that; Mr. Kennedy, who will appear here, who has charge of our welfare and labor and all that sort of thing, can give you the details, but my understanding is that there are a great many crafts in this new wage scale which are going to be earning from $5,000 to $6,000 a year.

Senator RANSDELL. The laborers you mean—skilled laborers?

Mr. ROBINSON. Some of the skilled men, riveters, the hoisting engineers.

Senator RANSDELL. They will probably receive more than 100 per cent increase on the wages that they formerly received?

Mr. ROBINSON. I can not say that out of hand, but I will have the figures of that sort presented to you that will be authentic.

Senator RANSDELL. Do you know whether or not it is a fact that farm labor gets perhaps 100 per cent more than it did before the war broke out?

Mr. ROBINSON. I hear them hollering they have not enough help, and the only way I know they are going to get it is to pay more

money for it. The old law of supply and demand is a pretty ba thing to put up on the shelf.

Senator RANSDELL. I was just wondering whether there is any con nection between the general increase of wages to skilled and unskille laborers and the increase of salaries for high-class men.

Mr. ROBINSON. The only increase we have made is just as I hav stated—to our own men, the ordinary increase, the examples; that i the way our men have been raised from year to year. The men wh went onto that job with the Stone & Webster forces received no mor increase, considering the conditions—what they had to pay to g there, their increased living expenses—than they would have receive had they stayed on other work with Stone & Webster as of Januar 1 this year. I would like to get that clear and thoroughly unde stood.

Regarding the other men we have hired to go onto this job, we ha not gone out peddling large salaries or waving large salaries in t air. We have used our best judgment to get the men that we thoug would do the work here, and we have paid them what it was nec sary to get them, even though in some cases we knew it was m terially more than they had been getting. Why? Look at it fr this standpoint. Here is a man like Martin, manager of ship co struction. He had been down at Sparrows Point for 10 or years—I do not know how long. Now, he could have stayed th as long as he wanted to. Is he going to leave that job and take job at Hog Island unless he has some patriotic feeling? A sm difference in salary is not going to bring him there, because he do not know whether this job is going to last six months or six yea I do not know. That is at the bottom of a lot of this salary incre that has been called excessive, because you had to pay what is nec sary to cover the uncertainty that has been connected with t proposition.

Senator VARDAMAN. As a general rule they came because t higher salaries were paid.

Mr. ROBINSON. I do not agree with you, Senator Vardaman.

Senator VARDAMAN. They came because the higher salaries we paid and not because of the mobilization of the enterprises or t personnel belonging to these enterprises to whom this contract w let?

Mr. ROBINSON. I like to feel that the people of this country in walks of life are patriotic. I believe they are. But there are great many different ways of evidencing patriotism.

Senator VARDAMAN. I do not like to see it measured by the doll measure.

Mr. ROBINSON. I agree with you..

Senator VARDAMAN. I think a man who will take advantage of th war to make money out of it is about the most undesirable citiz that we have.

Mr. ROBINSON. You can not get in an argument with me on th Senator, because I agree with you right from the ground up.

The CHAIRMAN. Have there been any other delays in connectic with the work? If so, what has caused them?

Mr. ROBINSON. We have not had any serious delays. At first w had a lot of difficulties in the start, as I say, in getting the wor

going along. The first thing we had to do was getting an organization assembled, getting transportation facilities in, roads built, the place mapped out, foundation conditions studied and developed, and the materials ordered just as fast as we could gather the information that would give us a chance to order it intelligently, because there was ever one thing we have had in mind, and that is speed in producing here a place for steel as fast as we could possibly get the boats designed, detailed, and steel ordered and brought here, and that we have done. So, I do not think there has been any delay, because we have got at least 12 ways that we could put steel in today if we could get the steel.

Senator JONES. Can you not get the steel?

Mr. ROBINSON. We can not get it as rapidly as we can use it now. In fact, we are not getting it quite as rapidly as we expected to get it.

Senator JONES. That is causing delay, then?

Mr. ROBINSON. Well, in a way. We are gradually building up our force, and if we had more steel I think we would be getting along a little faster. It has not really delayed our construction program. Of course, we are all pushing as hard as we can. The Government is helping, too, and Admiral Bowles is alive to that situation.

The CHAIRMAN. Do you feel that you are up with your program now?

Mr. ROBINSON. I do not see any reason why we can not meet the contract dates for boats. We had hoped to beat it, to beat it materially, and we still hope to get some of the boats off earlier than the contract requires. But there are those two things over which we have no control. The steel we have no personal control over, except as we can get our details worked up more quickly and get our bills of materials out more promptly. Then it is up to the Government to get the plates and see that the steel mills get coal, which they have not gotten, and see that the railroads move the stuff, which they have not been able to do. And there is a situation that ought not to be allowed to exist next winter. That is behind us now, practically, and everybody ought to be able to go along at top speed, but the condition that existed this year as to lack of coal and fuel oil and all those things that are essential to keep the industries of this country at top notch ought not to be allowed to occur again. We ought not to have any more "Garfield holidays" in this war if we can help it.

Senator VARDAMAN. You can not get up any controversy with me on that proposition. [Laughter.]

The CHAIRMAN. There are no causes of delay now except the slowness in the delivery of steel?

Mr. ROBINSON. That is my feeling about that. I will ask one of our boys to touch on that more specifically, Senator.

The CHAIRMAN. You think you have got force enough now?

Mr. ROBINSON. Yes; we have a sufficient force for the time being.

The CHAIRMAN. Enough force to go on with the work if you only get your steel?

Mr. ROBINSON. Yes.

Senator NELSON. Have you called the attention of the Emergen Fleet Corporation to the fact that you need more steel?

Mr. ROBINSON. Oh, Admiral Bowles is right with us—which is the best thing that has ever been done. We were trying for months to get the Shipping Board to send somebody down to Philadelphia to settle things so I would not have to be chasing to Washington continually.

Senator NELSON. I understand some of the fabricating work has been ordered out in our State—in Minnesota—and some out in Nebraska.

Mr. ROBINSON. Yes, sir; and your colleague, Senator Reed, wanted to know why we did not put some in St. Louis. And I might say, too, that that steel is some of the best we are getting, and some of the quickest. The transportation from out there seems to be better.

Senator NELSON. The trouble with our transportation is that while our roads have cars enough when we send them east, we never get them back.

Senator RANSDELL. When the Senate committee was there, the other day, Mr. Robinson, you were actually proceeding with the construction of one ship?

Mr. ROBINSON. Yes, sir.

Senator RANSDELL. And you were ready to proceed with six others if the steel had been on the ground?

Mr. ROBINSON. To-day, I understand, we have 11 other places where we could begin to put down steel.

Senator RANSDELL. Where you could lay keels and begin to build ships if the steel were there?

Mr. ROBINSON. Yes, sir.

I thank you for your patience with me, Senator Vardaman. There is one question you asked me that I want to go back to. You asked me if I knew of any stockholder in the American International Corporation that was interested in any of these subcontracts. I do not know of my own knowledge, but I presume that Mr. Holbrook, who is a vice president of the American International, is a stockholder in it. His firm, Holbrook, Cabot & Rollins, was given a contract for this pier work, which they had specialized on for years.

Senator VARDAMAN. What is the amount of that?

Mr. ROBINSON. I think that is about $1,600,000.

Senator VARDAMAN. And they get a 5 per cent fee on that?

Mr. ROBINSON. No; they get a fee based on that. The situation was explained by me to Admiral Capps. It was explained by me to Admiral Rousseau. I said, "Here is the situation: Here is Mr. Holbrook, just back from Russia, the ablest man in this line of work. His firm has specialized in water work, pier work for the railroads, and subway work. If it is going to cause any embarrassment to you gentlemen if we enter into this contract with Mr. Holbrook, because he is vice president of the American International Corporation, please say so. We would like that firm to take this contract, but if that is inadvisable please tell us."

Senator VARDAMAN. You do not know of any stockholder in this parent corporation that has any interest whatever in any of the material that is being furnished for the construction of this plant?

Mr. ROBINSON. Well, I can not say that. Probably it is so. For instance, the contracts for the turbines which are going to drive the propellers in these vessels to make them move were, by the instructions of the Shipping Board, placed with the General Electric Co.

The president of the General Electric Co. is one of the directors of the American International Corporation; he very likely is a stock holder, also. To that extent he has benefited from that business.

Senator VARDAMAN. He is the only one you know of?

Mr. ROBINSON. Well, I should say, out of hand, yes; because I am not particularly familiar with the directorate, Senator. But if they had told us to buy those turbines from the Westinghouse Co. the situation would have been exactly the same, because Mr. Tripp, of the Westinghouse Co., who is down in the Ordnance Bureau here as a colonel, helping them out, is also one of the directors of the American International.

Senator JOHNSON. Before we adjourn, as a matter of curiosity, Mr. Robinson, can you tell me whether or not telegrams were sent to members of the press by the American International to be present here to-day?

Mr. ROBINSON. No; I do not know.

Senator JOHNSON. You do not know anything about that?

Mr. ROBINSON. I do not.

Senator JOHNSON. Has anything been said to you concerning it?

Mr. ROBINSON. No.

Senator JOHNSON. Do you know whether or not the American International is conducting a propaganda now?

Mr. ROBINSON. No; I do not. I can understand how they might desire to get an honest statement of the facts here before the public. I do not know what they are doing or how they are doing it.

Senator JOHNSON. Have you anything to do with it?

Mr. ROBINSON. Nothing whatever.

Senator JOHNSON. Who has?

Mr. ROBINSON. I do not know who has handled it.

Senator JOHNSON. Who is handling [illegible] and the like that have been sent to some of the newspapers of the country at least—I do not know whether to [illegible] expense of this propaganda of the American International [illegible] you know?

Mr. ROBINSON. If it exists I would say the American International is paying it.

Senator JOHNSON. Do you know [illegible]

Mr. ROBINSON. No; I do not [illegible]

(Thereupon, at [illegible] p. m. the committee adjourned to meet at 2 o'clock p. m. to-morrow, Wednesday, March [illegible])

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

WEDNESDAY, MARCH 6, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m. in committee room, Capitol, Senator Duncan U. Fletcher presiding. Present: Senators Fletcher (chairman), Ransdell, Vardaman, Nelson, Jones, Harding, and Johnson.

The CHAIRMAN. Mr. Robinson, the committee is ready for you to continue now.

Mr. BALDWIN. Mr. Chairman, may I have the pleasure, first, of presenting the telegram that Senator Johnson asked about last evening? I should like to read a copy of that.

The CHAIRMAN. Yes; I think that would be in order.

ADDITIONAL STATEMENT OF MR. GEORGE J. BALDWIN, CHAIRMAN OF THE BOARD, AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, NEW YORK CITY.

Mr. BALDWIN. This is a telegram sent out by my secretary. I did not have a copy of it last evening, that was the reason I did not read it then. The telegram reads as follows:

[illegible]

[illegible]

[illegible]

Mr. BALDWIN.

Mr. BALDWIN. I think there were some of them [illegible]

[illegible]

even our honesty of purpose seems in question. The only course we know of is to so present matters to this committee that it shall have the fullest knowledge of every act and of every intention of ours, because we look to it as the court to judge, and to tell the people of the country who we are and what we have done; whether we have fulfilled our trust properly or whether we have not. And it seemed to us that the widest publicity that could be given to the testimony here submitted would be for the benefit of the Nation as well as for the benefit of ourselves.

We know that it will cost money; we know that those things do cost money. But we feel that we are prepared to spend the last dollar that we have to defend our good name, and we propose to devote the last ounce of energy that we have to the building of ships.

I thank you, Senators.

Senator JOHNSON. Mr. Baldwin, to how great an extent is the propaganda now carried on by that corporation?

Mr. BALDWIN. That is all we have done, sir.

Senator JOHNSON. Has nothing else been done?

Mr. BALDWIN. Nothing else has been done, except that the newspaper people and magazine writers have gone to Admiral Bowles and have been sent by him down to the yard.

Senator JOHNSON. No propaganda has been sent out to the various newspapers by the American International Corporation?

Mr. BALDWIN. No, sir.

Senator JOHNSON. Were you here last evening when I asked Mr. Robinson about that?

Mr. BALDWIN. Yes, sir. I did not have a copy of the telegram in my pocket at that time.

Senator JOHNSON. Yes.

Senator VARDAMAN. Mr. Baldwin, the expenses of that, you state, are paid by this corporation?

Mr. BALDWIN. Paid for by the American International Corporation.

Senator VARDAMAN. And not by the Government?

Mr. BALDWIN. Not by the Government; no, sir.

The CHAIRMAN. Mr. Robinson, the committee will hear you now.

STATEMENT OF MR. DWIGHT PARKER ROBINSON, PRESIDENT AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, PHILADELPHIA, PA.—Resumed.

Mr. ROBINSON. Mr. Chairman and gentlemen, I am sorry to take up more of the time of the committee, but there are a few more things that I want to touch on in connection with the work there at Hog Island.

I wanted to point out that, as I understand, some comment has been made, to the effect that it looked as though there was a good deal of clutter there; but I want to say that, of course, we had to carry on a lot of different kinds of work at the same time, and not consecutively, if we were going to get the speed. We had to do grading and sewering and watering and all that sort of thing; and to the casual observer I do not doubt that it did look as if there was a good deal of clutter there. But I think the results that we have obtained to date

have rather refuted that kind of criticism. It is the only way that we could get speed; and that is the one essential thing that we have been trying to get, and so far we have gotten it: that is, to have every stage, as we reached it, ready for going ahead: and so far we have been able to accomplish that. We have been ready for the steel when it came, and we are well ahead of that end of it: and I hope there is not any question but that that work can go along in a proper and orderly manner.

Now, I have talked a good deal about organization, about the organization that I have brought to the job there: the organization that we have had of our own, that we have built up over a term of years; and the men that we have got from other organizations—the men that have come in and volunteered their services. I know that it is rather difficult to comprehend just exactly what the organization means. When you talk about it, it is apt to look like a jumble of things. I have a chart here that I would like to lay on the table, which will give the members of the committee some idea of what our organization really does mean [exhibiting a large blue print].

I did not want to take a great deal of time going into this subject, excepting as any of you gentlemen may be interested in it.

This [indicating on blue print] is the central part of the organization under me. There are two divisions here [indicating]. There is Mr. Walter Goodenough, the general manager, who originally started everything going and got it going and organized.

Then Mr. Muhlfeld came along and took under his charge the yard end of it, while Mr. Goodenough devoted his attention to the ship end.

Now, as this goes down, with the yard work being done [indicating on blue print], behind us this organization [indicating] will expand more as it gets divided up and the ship work goes on. This [indicating] is in process of change all the time with the change in the work. It is not like a manufacturing proposition, where you are building automobiles, for instance, and your force is the same this month pretty much, as it is next month, and so on: but there is a change going on up there [indicating], so that, until we get the yard behind us, and only have the shipbuilding, we have to have all of this work going on at the same time. This work [indicating] will be increasing while this work [indicating] will be gradually going down.

I think that chart will show, perhaps, more than any amount of discussion will, what the organization really means, and show what we have really brought here to this project, and in such a short space of time.

Senator RANSDELL. Will you explain that blue print a little more in detail, Mr. Robinson? This [indicating] represents you, this central place here [indicating]?

Mr. ROBINSON. Yes, sir.

Senator RANSDELL. And this [indicating] represents the man next to you?

Mr. ROBINSON. It represents the man next to me in this division of the work. He is looking after the ship designing and the ship construction. For instance, he has certain assistants attached directly to him; and then under him is this fabricating department [indicating], under Mr. Lovekin; and that, again, is split up into different

departments, the machinery department and the hull department and things of that sort. He has under him here [indicating] material, engineering and layout, the steel yards, and production engineering, to work on the production schedules of the boats.

Here [indicating] is the manager of ship construction, Mr. Martin, who is one of the men whose salary was spoken about in the committee yesterday. He was a long time with the Sparrows Point Shipyard; he could have stayed there indefinitely.

He has under him this assistant [indicating] who looks after certain things, such as electrical installation. Here [indicating] is the installation of machinery and things of that sort, and here [indicating] is General Superintendent Fortune, who has to do with the fabrication of the boat.

Here [indicating] is another ship-construction manager whose position has not been filled. And here [indicating] are men working on shops at the present time; and so it goes along. It is the same way at the other end of the work; it is a matter of planning out. These men down here [indicating] have men over them; and you will find that those lines on the chart all lead up somewhere to the head.

Senator VARDAMAN. Are those places that you have marked on this chart [indicating] all constructed at the present time?

Mr. ROBINSON. This is just a personnel chart, Senator Vardaman. These little blocks show the activities and, so far as possible, the men in each of them.

Senator VARDAMAN. Yes; I see.

Mr. ROBINSON (continuing). And they show the different kinds of construction that are going on in the yard. That [indicating] is the yard end, and this [indicating] is the ship end.

Now, the ability to assemble that quickly is one of the things that we brought to this project, because by being able to do that we have been able to speed the work.

In connection with our shipbuilding program, and in connection with the layout of the yard, and the designing of the yard, we have provided there more shop capacity than a good many people have thought we had—that is, until they have visited us and looked over our detailed plan. The general idea has gone out, because we have said that we were not going to do anything at the yard that we could get done for us, that we might get caught by delays in transportation, either the material not coming in or if it came in, not coming in in just the way we wanted it, so that changes would have to be made. But we have ample shop facilities there to provide for any emergency; in other words, that is an insurance of speed there. We will, of course, be more than satisfied if we do not have to work in those shops at all, but we know that we can not plan and have everything come in right; and we can not afford to take any chances in this matter.

Senator JONES. What have you put in there to meet the emergencies of which you speak?

Mr. ROBINSON. We have put in a plate shop, an angle shop, and full shop equipment, not for 50 ways, but for such number of ways as a small yard would have; because we only have to do certain things; we know that a large percentage of the material is sure to

come all right. It is a matter of judgment, and we have used the judgment, in consultation with the best people that we could get hold of—men like Mr. Martin and Mr. Wood, who was president of the Maryland Steel Co. for years, we have had the judgment of such men as those about equipment.

Senator VARDAMAN. In having different parts of the ship fabricated at other places—take, for instance, the steel, is that steel prepared at the mill, perforated and all that sort of thing before it leaves there, or have you, in any instances, had the steel shipped from the rolling mill to some other place some distance away, to have that work done on it?

Mr. ROBINSON. That is practically the way it is done, Senator, the way you last stated. That is, the sheets, and the angles, and the shapes are rolled at the mills, and then shipped by the mills to these fabricating shops that have been building steel frames for buildings all these years and building tanks, and boilers, and that sort of thing, which have the appliances for doing that kind of work, punching the steel and shaping it, and, if possible, doing a certain part of the riveting before it comes to us at all. We have been even trying to get the riveting done outside where we could.

Senator VARDAMAN. Is that the rule which is generally followed in this steel construction?

Mr. ROBINSON. Well, that depends on exactly what you mean by your question, whether you mean in shipbuilding, or in structural-building work. In building work, I would say, yes.

Senator VARDAMAN. You stated yesterday that there was no more trouble about this kind of work than there was in putting up steel buildings, or any work of that kind with that steel.

Mr. ROBINSON. Yes.

Senator VARDAMAN. So that I asked if it was the custom to buy steel from one mill and ship it some distance away to have it perforated, etc.

Mr. ROBINSON. Well, the usual commercial custom is to buy it from the fabricator. But in this case, under the Government control of steel and steel prices, etc., the Government tells the mills to ship this stuff to the fabricating plants. We have to-day the mills for the raw material—if you want to call it that—and the fabricating plants, for what they do to it; and then it comes to us.

Senator VARDAMAN. All of which adds greatly to the cost—the shipping and handling of that material—does it not?

Mr. ROBINSON. On the contrary, I think, it would lessen the cost.

Senator VARDAMAN. You think it would lessen the cost?

Mr. ROBINSON. Yes; on account of the speed with which you can put it together. And you can utilize the equipment and the shops of the very highest degree of skill and equipment in doing that work. They have been doing that kind of work for years; in other words, the work is done, you might say, by specialists. We have that material shipped to people who have been doing that kind of thing for years. For instance, in erecting a building in Seattle, Wash., the framework is fabricated, as we call it, in the East; we would ship it out there, and it would be put together after it gets there. And it is the same thing here.

Senator VARDAMAN. I understand that it must be fabricated at the steel mill and then shipped to you; but I was wondering why it was

that it was sent to another mill some distance away to have certain work done on it.

Mr. ROBINSON. Because, if we did all that at this plant it would mean a tremendous additional amount of equipment, which we could not get even if it was desirable, on account of the fact that the machine tool market was stripped; and it would mean organizing a tremendous force here. We thought it was very much better to use the forces already in existence that had been trained to do the thing.

The CHAIRMAN. I think what was in Senator Vardaman's mind was, why can not the fabricating be done at the steel mills.

Mr. ROBINSON. Ordinarily they do not do it. Some of the mills do it to some extent; but the run of the steel mills do very little of that. Of course, some of the steel concerns have fabricating divisions or departments that fabricate their steel, such as the American Bridge Co., for instance, which is a part of the United States Steel Corporation; and the Lackawanna Bridge Co., which has an arrangement with the Lackawanna Steel Co. But there are a number of others, like the McClintic-Marshall Co., and a good many others of the best plants, that have no connection with the mills that I know of; they may be interested in them, but they buy their steel in the open market and fabricate it.

The CHAIRMAN. Ordinarily the concern that turns out the steel does not do any fabricating, does it?

Mr. ROBINSON. Some of them do; but I would say that ordinarily they do not, from my knowledge of the steel industry, which is fairly good, as I have a couple of brothers in it.

Senator JONES. With regard to these emergency buildings that you speak of, have you a plant to do emergency fabricating?

Mr. ROBINSON. Yes; we can do anything on the boat that is necessary to do. We have rolls that we roll the plate; punches, furnaces, etc., so that we can do anything that has to be done.

Senator JONES. So that if those fabricating plants, or any of them in the country that are doing this work for you, should not be prompt, you could supply in the yard what they failed to furnish you.

Mr. ROBINSON. That is the idea.

Senator JONES. And that is the reason that you put some of those extra buildings in there—so as to do any emergency work?

Mr. ROBINSON. Yes, sir; and that has added to the cost of the yard; but I do not think we would be justified in doing it in any other way.

Senator VARDAMAN. You do not intend to do any of that fabricating in the yard, do you?

Mr. ROBINSON. Not unless we have to do so.

Senator VARDAMAN. But that is rather a repair shop, is it?

Mr. ROBINSON. An assembly shop.

Senator VARDAMAN (continuing). To correct or supply some defects or omission, or anything of that kind?

Mr. ROBINSON. We are prepared, in case some concern falls down on contracts to furnish us material, or in case the transportation becomes congested and some little thing holds up or delays putting the boat in the water, to produce that missing part right there in the yard.

Senator VARDAMAN. But, of course, you do not propose to roll the steel right there?

Mr. ROBINSON. No; of course we have no rolling mill. Now, we have, in order to guard against delays and permit us to use uniform speed, what may seem to be pretty elaborate storage yards for steel, but that is all a part of the plan, and I think it is a perfectly reasonable thing to do. I will show you an example of that. Here [indicating on blue print] is where a large part of this railroad track has gone that people have said we have too much of. I think there are something like 20,000 pieces to each one of these boats. Now, we hope that steel will come in in sufficient quantities so that we can have enough for three or four boats on hand at one time. And then, if there is a delay in transportation and a few more of the "Garfield holidays," we would have steel on hand, so that our shipbuilding program could go right along.

Senator JONES. That is, when you say "steel on hand," you mean fabricated steel?

Mr. ROBINSON. Yes, sir: for the different parts of the boat. For instance, here [exhibiting a blue-print map] is the plan of the yard. This [indicating] is the railroad track, and these [indicating] are bins where the steel is taken out of the cars. We would be very much pleased if we did not have to put a ton of steel in there [indicating on blue print] and if it could all go direct into the boats. But we know very well that we can not do it that way, and we are going to try to get a stock of steel here [indicating] for these A boats and a stock of steel here [indicating] for these B boats.

Senator RANSDELL. The A boats are 7,500 tons and the B boats are 8,000 tons, are they?

Mr. ROBINSON. Yes, sir—well, because these boats have a faster speed; they have a speed of 15 knots. Now, we know the need of the different vessels, and cars are loaded ahead, and are placed in here [indicating], and then the day that steel is needed it is brought here and put into the slip where it is needed. What we have in here [indicating] is a conveyor system.

The CHAIRMAN. You have your own locomotives and your own cars, have you?

Mr. ROBINSON. Yes, sir; we have a lot of cars that we have bought there, and locomotives. I mean out here [indicating] and here [indicating] and out on the basin [indicating], and all of that is for assuring the carrying out of the program.

It has taken a great deal of study to develop all this storage and get the bins and the places right. Every one of those pieces varies to a certain extent, and we have the thing catalogued, a good deal like an atlas, and there are certain lines running this way [indicating], and it is an intricate problem altogether.

The CHAIRMAN. Can you tell the committee how many locomotives and how many cars the Government has provided?

Mr. ROBINSON. I can get that information: I do not happen to have it in mind. We have a lot there—used in connection with switching and moving——

Senator JONES (interposing). Everything that is there belongs to the Emergency Fleet Corporation?

Mr. ROBINSON. Absolutely.

The CHAIRMAN. Are those new locomotives and cars?

Mr. ROBINSON. No; some of them have been doing grading; we rented some; we bought some secondhand; and I think we have h

two or three new ones on order. We have had to pick up what w could in a hurry, in the early stages, to the greatest extent we possibl could.

Senator VARDAMAN. Where did you buy those engines and cars from the railroads?

Mr. ROBINSON. Wherever we could get them; I suppose largel from secondhand dealers. I have no personal knowledge of tha but you will find it in the records of the Government.

Senator VARDAMAN. Well, what I have in mind now is, have yc rented any of those dredges and things of that kind?

Mr. ROBINSON. I should think we have rented practically all (them; that is to say, we have made a contract with the dredgin companies there, which is a matter of record——

Senator VARDAMAN (interposing). Have you rented them by tl month, or how have you rented them?

Mr. ROBINSON. That depends. We got them together with the ho that we would get a month or two of dredging in before the co weather began. In an ordinary winter we could have been workin pretty much all along; but whenever you are trying to do anythin in a certain time you always have extraordinary conditions to wo under; if you are working in the river you always have more wat than usual; and here we had more ice. As to the details of tho dredging contracts I have not them in mind, as it is some time sin they were closed; but my recollection is that when they are not worl ing we pay less rental for them than when they are working. C course, that was the only way we could get the dredging done—t taking the people who were in the business, getting their equipmen and making a deal with them to do the work.

Senator VARDAMAN. Let me ask you this question: Do you pay tl usual price for that work?

Mr. ROBINSON. I think we do. We made the best trade that w could on it; and the matter was taken up at the same time with tl representatives of the Fleet Corporation. We had our best me working on it. Mr. Muhlfeld gave it his personal attention. Our M McConnell helped on it; and I think we found a very good set (men in Philadelphia to deal with; that was the impression I gatl ered of them—particularly Mr. Haywood, who has quite a bit t do with it; I thought he seemed most interested to help out he and showed the most patriotic kind of spirit.

Senator HARDING. Let us take a specific pile-driving contract—f instance, one of the concrete pile-driving contracts.

Mr. ROBINSON. We only have one.

Senator HARDING. Well, let us take that one. Do you pay them rental on their pile drivers?

Mr. ROBINSON. Yes, but not so much per month. We made r a list of the equipment for that; we specified the equipment th thought was necessary to get the work done in the time in whic we wanted it done—the time in which it had to be done. We agre with them that this work ought to take about so long to do, ar that we would pay them a rental for that equipment, based (that estimated time, and based on the value of the equipment. Tl current rate for that, according to my recollection, is 5 per cent month on the value of that kind of equipment. If we figured that w were going to be on that work four months, we would pay them 5

per cent of the value of the equipment as a rental; but we did not pay them any more if they were on that work six months, or eight months. They get so much for that job and that equipment, as specified. Now, they have an incentive to get through that work quickly, because then they can put that equipment to work somewhere else, and then they can get the same rental for it there.

Senator HARDING. The point I want to get at is, that you pay them rental for their equipment?

Mr. ROBINSON. You might say a fixed amount, based on the job; a rental, but not a monthly rental.

Senator HARDING. And you estimated it as a 20 per cent rental on the value of the equipment for four months' service; is that correct?

Mr. ROBINSON. Yes, sir.

Senator HARDING. What does the pile driver get for his services there?

Mr. ROBINSON. He gets, in addition to that rental, a fixed fee; a fixed amount of money, which in that particular contract, as I remember it—and I think all the pile-driving contracts were the same, with possibly one exception—was 5 per cent on what was agreed by them, and by us, and by the Fleet Corporation's representatives, was a reasonable estimate of the cost of that work. For instance, if his work would amount to $600,000, he would have had a fee of $30,000, whether the work cost $600,000, or $700,000, or $1,000,000; so that he got a fixed fee for his work and a fixed rental for his equipment; those two things were added together, and that is the contract price which was paid. Whether the work cost more, or the time was longer than estimated, he got no more either for his fee or as rental of his equipment.

That was also the same form of contract that we have with the Government, with regard to the provision that if he did not perform the contract properly, we retained the right to throw him off the job, just as in all our contracts for performing work, the people for whom we are working have the right to throw us off the job. So that we kept the situation entirely under our control, so as to be able to control the speed, and so that if these people did not do as we thought they should we could throw them off the job.

Senator HARDING. Would you think that 20 per cent of the value of a machine of that kind would be only a fair compensation for that use of it?

Mr. ROBINSON. My understanding is that that is the usual and proper compensation for that kind of equipment. We considered that very carefully before we made that contract.

Senator HARDING. Then, if a pile driver were in constant use for two years, it would pay for itself?

Mr. ROBINSON. Well, if you were going to have a two-years' job of that kind, it would pay you to buy your equipment and then sell it when the work was finished. But here was a job that it was figured would take four months to complete. And we also wanted equipment that we could get quickly and put on the job quickly; and I think you will find, if you look into the matter, that that is the usual form of rental contract in these cases.

The CHAIRMAN. In most instances, this rental form of agreement would not be a very advantageous thing to the contractor doing the work, would it?

Mr. ROBINSON. No, sir.

The CHAIRMAN (continuing). On account of the fact that it might take longer than was estimated to do the work.

Mr. ROBINSON. Yes, sir; that has happened in this case. That is the reason that we made the contract in that form; there is no incentive in that contract for them to "soldier" on the job for six months or a year.

Senator VARDAMAN. A Senator told me this morning that he had heard of some man who rented a dredging machine—I think it was from somebody in Delaware—for which he paid $400 a month; and the man took it to Philadelphia and sublet it to your company, or to somebody working under you, for $900 a month. I do not know whether there is anything in that story, but I am going to look further into it. Have you any contract like that?

Mr. ROBINSON. I hope not. I could not say off-hand that that is not true; but we certainly did not think we made any contract like that. It is quite possible that that might be true. But all our contracts, Senator Vardaman, are a matter of record; I rather think they have a copy of every one of them down here in the office of the Fleet Corporation. We tried to protect the Government in those matters to the fullest extent that we could. I will not say that there is not any such contract, because I do not know.

Senator VARDAMAN. I do not know either; but the witness's name will be sent to me, and I am going to have him summoned to appear before the committee.

Mr. ROBINSON. I will be glad to get the facts in the case, if that is true.

Senator VARDAMAN. I am sure you would; and that is all I want to do, to bring the whole thing out before the public and let them know just what their agents are doing.

Mr. ROBINSON. I hope it will be brought out, because you are no more anxious to bring out the facts, Senator, than I am, or the men associated with me are. We have not done anything to be ashamed of—done a thing consciously, that we are ashamed of——

Senator NELSON (interposing). May that not be because you have become so callous? [Laughter.]

Mr. ROBINSON. I do not think so, Senator. Our hide is getting a little thick in spots, however.

Senator JONES. Mr. Robinson, take this pile-driving contract. As I understand, you have agreed, in substance, to pay a certain rental for the machinery?

Mr. ROBINSON. Yes.

Senator JONES. Then you pay somebody a certain percentage?

Mr. ROBINSON. Well, not a percentage; no; but a fee.

Senator JONES. Well, a fee?

Mr. ROBINSON. Yes; a fee arrived at by figuring a percentage of the estimated cost.

Senator JONES. Well, say you pay him $25,000——

Mr. ROBINSON (interposing). It is $25,000 or $30,000; somewhere along there.

Senator JONES. Well, what do you pay him that for? The Government, as I understand, furnishes all the labor and furnishes all the material and everything. Now, what do you pay him that for?

Mr. ROBINSON. We pay him that for his experience; for his organization; for his superintendence; for his foremen and men of that kind that he knows about and brings on the job, just as the Government is paying us for ability to organize the job as a whole.

Senator JONES. But you pay the foremen that he brings on and you pay the superintendent that he brings on?

Mr. ROBINSON. Yes; but he knows where to get them.

Senator JONES. And that is what you pay him the $25,000 or $30,000 for, is it?

Mr. ROBINSON. Yes.

Senator JONES. Now, is he carried on the rolls as an employee?

Mr. ROBINSON. The contractor?

Senator JONES. Yes.

Mr. ROBINSON. No, sir. I think the superintendent is; I think anybody who puts all of his time is carried on the pay roll.

Senator VARDAMAN. The superintendents?

Mr. ROBINSON. I think so.

Senator JONES. The contractor is not required to put all of his time in on the work, is he?

Mr. ROBINSON. No.

Senator JONES. And for that, and for the knowledge that he has in putting that force together, he gets that $25,000 or $30,000, or whatever it is?

Mr. ROBINSON. That is it exactly. Now, among other things that are necessary to get this work done are——

Senator JOHNSON (interposing). Before you leave that subject, if you please, Mr. Robinson, we will dispose of it if you will permit me.

Mr. ROBINSON. Yes, sir.

Senator JOHNSON. Let us make perfectly clear now what the subcontractor does and what you do. And if I recapitulate in any particular inaccurately I ask that you will correct me, because my design and purpose is solely to repeat with absolute exactness:

First, the Government has entered into this contract with you, in which you receive the stipulated sum because of your experience, because of your organization, because of your supervision, and the like; that is correct, is it not?

Mr. ROBINSON. Yes; but none of that is based on the work at the yard, Senator.

Senator JOHNSON. I understand; you enter into contracts with subcontractors?

Mr. ROBINSON. Yes, sir.

Senator JOHNSON. And you pay those subcontractors for their experience, their supervision, their organization, and the like, do you not?

Mr. ROBINSON. Yes, sir; on their particular part of the work.

Senator JOHNSON. And you pay them for that supervision, organization, and the like, 5 per cent, the fixed fee that you have suggested?

Mr. ROBINSON. Based on that.

Senator JOHNSON. In your specific contracts made thus with your subcontractors you agree, do you not, to rent from them their equipment first?

Mr. ROBINSON. Yes; which is specified and listed.

Senator JOHNSON. You agree to pay for their organization, do you not?

Mr. ROBINSON. Well, I will say——

Senator JOHNSON (interposing). I am not speaking of the fee now; but I am speaking of paying the salaries and the like for that organization?

Mr. ROBINSON. Yes; I think that is true.

Senator JOHNSON. You agree to pay for all the employees of the subcontractor as well, do you not?

Mr. ROBINSON. We furnish most of them.

Senator JOHNSON. Now, coming from the top to the bottom, as it were—that is, the first contract—the Government stipulates and provides for paying for your experience, does it not?

Mr. ROBINSON. Yes.

Senator JOHNSON. And you stipulate and provide then for paying for the experience of those to whom you let your subcontracts? Do you have any equipment?

Mr. ROBINSON. No; we have no equipment.

Senator JOHNSON. Have Stone & Webster any equipment at all?

Mr. ROBINSON. None whatever.

Senator JOHNSON. But for all of the equipment furnished by your subcontractors a specified rental is provided for?

Mr. ROBINSON. Yes. And, if I may interrupt you, a great deal of equipment has been bought for the job which will be sold at the end of the job.

Senator JOHNSON. All bought by the Government?

Mr. ROBINSON. All bought at the Government expense.

Senator JOHNSON. In your subcontracts do you provide for the organization, for the engineering skill, for every practical or technical knowledge in relation to the particular subcontract?

Mr. ROBINSON. I do not know that I quite understand that question.

Senator JOHNSON. I mean, in your subcontracts, do you not stipulate to pay for the organization of the subcontractor, his experience, his practical skill, the engineering skill of his organization, and the like?

Mr. ROBINSON. I have not the exact terms of the contract in mind, Senator, but in general we pay for every man who is on the job continuously.

Senator JOHNSON. Yes.

Mr. ROBINSON. The contractor himself, of course, furnishes supervision; he has the expenses of his home organization and that sort of thing.

Senator VARDAMAN. Does the Government pay for that?

Mr. ROBINSON. No; that comes out of the contractor's fee, Senator; all of those expenses away from the yard here [indicating].

Senator JOHNSON. But you are paying, are you not, for the engineering and the drafting departments of every single contractor to whom you let a contract?

Mr. ROBINSON. No; I do not know just how the contract is worded, but in our own——

Senator JOHNSON (interposing). Well, in order that I may be entirely fair with you I will say that I am looking at one of the forms of subcontracts here now.

Mr. ROBINSON. Well, I would like to have one before me also, if I could.

Senator JOHNSON. Yes; that is why I suggested that to you in order to be fair.

Mr. ROBINSON. I would like to have an opportunity to examine one. [A printed copy of part 6 of these hearings was handed to Mr. Robinson.]

Senator JOHNSON. I am glancing now at a contract of the American International Shipbuilding Corporation with the Bates & Rogers Construction Co. Do you recall that?

Mr. ROBINSON. Yes. They have a lot of railroad work; they are capable people.

Senator JOHNSON. I observe, among other things, that the cost of work was to include—I am glancing at the third subdivision of the contract, printed on page 1606 of the record of these hearings—the cost of all material, machinery, and labor entering into the work.

Mr. ROBINSON. Article 3?

Senator JOHNSON. Yes. It was to include also "(*b*) The cost of small tools and construction equipment, except that to be furnished by us as above specified." What would you say as to that?

Mr. ROBINSON. Well, that is supposed to be the material that is used upon the job.

Senator JOHNSON. The contract next provides that the cost shall include "(*c*) The cost, at salary rates, of men in the engineering and drafting departments in our Chicago office."

Mr. ROBINSON. That means when they are working on anything in connection with this. In this particular contract I do not think there were any.

Senator JOHNSON (reading):

Or in the field, in connection with any engineering, designing, and inspection work which we may be called on to do in connection with this work for the time actually engaged on the work.

Mr. ROBINSON. At straight salary pay-roll rates.

Senator JOHNSON (reading):

(*d*) The cost of a works office, including the salaries of a superintendent of construction, an accountant, and such assistants as they may require; the cost of all field engineering and inspection required; and the expenses of maintaining a works office.

Mr. ROBINSON. Yes, sir; that is work on the ground, of course; the office on the ground.

Senator JOHNSON (reading):

(*e*) The cost of insurance and any expense incurred in connection with any accident or damage to person or property.

Mr. ROBINSON. Yes.

Senator JOHNSON (reading):

(*f*) Any traveling expenses or expenses of similar character and "other like expenditures" which we may make, except for items specified in section 1. "All, however, subject to the approval of the duly authorized representatives of the United States Shipping Board Emergency Fleet Corporation," as furnished at our own expense.

(*g*) Freight charges and loading and unloading expenses paid by us for or in connection with the transportation of construction machinery and equipment furnished by us to and from the place of the works, provided that the charges for transportation of such construction machinery and equipment over distances in excess of 1,200 miles shall require your special approval.

Mr. ROBINSON. Yes.

Senator JOHNSON. Now, that is a sample, I take it, of the cc tracts that were entered into by you—the subcontracts?

Mr. ROBINSON. Yes; and it is very similar to the contracts unc which we do our work—Stone & Webster.

Senator JOHNSON. So that there are, then, at least two steps in t contractual relations of those who are doing the work at Hog Islar the first step being that whereby you are to provide the organizati the engineering skill, and the like, and for which you are to recei the stipulated price; the second step being where the subcontract furnishes to you the engineering skill and the organization and t like, for which they receive a stipulated sum?

Mr. ROBINSON. If we ask him—whenever he is called on to do

Senator JONES. Senator Johnson, will you permit me to ask M Robinson a question at this point?

Senator JOHNSON. Certainly; you may go ahead.

Senator JONES. This stipulated sum, which is paid to the cc tractor, and which might be termed his "experience fee," does r come out of your "experience fee," but is paid by the Emergen Fleet Corporation, is it not?

Mr. ROBINSON. It is paid by the Emergency Fleet Corporatio that is right.

Senator JOHNSON. I wanted to settle the matter of the subcontrac because we were on that subject at the time.

Mr. ROBINSON. Yes.

Senator JOHNSON. And you may now go on with your stateme if you so desire.

Mr. ROBINSON. That is all perfectly plain, Senator.

The CHAIRMAN. In that connection the question naturally aris why the American International Shipbuilding Corporation did n do this work itself, without letting subcontracts.

Mr. ROBINSON. Because, Mr. Chairman, we felt that that was t only way in which we could get this work done on time. And it quite the customary thing to do, on ordinary commercial work, sublet certain portions of the work to people who have had partic lar experience and reputation and organization for doing work that particular line.

Senator VARDAMAN. When you made the first contract with t Emergency Fleet Corporation, was that fee to these subcontracto contemplated?

Mr. ROBINSON. Why, yes; I should say so; because you would nev get any work of this kind done with any one organization in tl country, Senator; you have got to call in all the help you can get.

Senator VARDAMAN. I thought they were to compensate you f your services, and your ability to mobilize all of those skilled wor men; that that was what the Government was to pay you for.

Mr. ROBINSON. Yes.

Senator VARDAMAN (continuing). That that was where your p came in, the six or seven million dollars that you were to be paid?

Mr. ROBINSON. Part of that knowledge that we are paid for is t knowledge of the right kind of contractors to find to do this wor that knowledge that we have acquired from our experience wi them, from our experience in running up against them in compe tion, and matters of that kind.

Senator JOHNSON. Did you select the subcontractors?

Mr. ROBINSON. We did, subject to the approval of the Shipping Board. We picked out the contractors that we thought were reliable and would perform their contracts.

Senator JOHNSON. Did you not make a mistake there? I thought you simply called for bids.

Mr. ROBINSON. Oh, no: we just called for this man, and that man, who we knew were reliable and who we knew from experience would be able to perform the work and would be interested in the work and whom we could control.

Senator JOHNSON. Now, is it the fact that all of these subcontracts had been let by you of your own motion?

Mr. ROBINSON. Subject to approval of the Shipping Board.

Senator JOHNSON. Of course, it was subject to approval of the Shipping Board.

Mr. ROBINSON. And after consultation with them, before the contracts were made. The form of contract was taken up with them and discussed, as to what we proposed to do and how we proposed to do it.

Senator JOHNSON. Granted; but you selected the particular individual to whom the subcontract should be let?

Mr. ROBINSON. Yes, sir.

Senator JOHNSON. And those subcontracts then were let by you to those whom you had selected, subject to the approval, of course, of the United States Shipping Board Emergency Fleet Corporation?

Mr. ROBINSON. Yes.

Senator JOHNSON. Has that been the course that has been pursued with all the subcontracts?

Mr. ROBINSON. As far as I know, I would say so; yes.

Senator JOHNSON. Have you in the past had business transactions and dealings with these subcontractors?

Mr. ROBINSON. I would say yes; with two: With Nawn, of Boston, who did a lot of work for us at one time, or rather worked under us at one time, when we were building additions to three power stations of the Boston Elevated Railway. He did all of the foundation work and piling work there, under a subcontract with us, which was let with the approval of the Boston Elevated Railway, who were our clients, and he did it very well.

The other was Jarrett & Chambers. Mr. Jarrett, at the time I first knew of him, was with the Foundation Co. of New York; and they worked in connection with us on a difficult piece of river work, out in Montana.

Outside of those two subcontractors, I would not say offhand that we had had dealings with any of them. There is the Kellogg Co., who are doing work in connection with piping; we have let piping contracts to them for years. We have not been associated with them in any way, however, as to participating in their earnings.

Senator JOHNSON. I was not asking about that, at all. What I was asking was for the purpose of ascertaining whether your relations with the subcontractors in the past had been sufficient to enable you to determine their reliability, efficiency, and the like.

Mr. ROBINSON. That was the reason why we selected them what we could find out about them and what we did know.

Senator JOHNSON. I will ask you again, is that the mode in which all the subcontracts were let?

Mr. ROBINSON. So far as I know; yes.

Senator JOHNSON. With only three of them that you can recall have you had any specific dealings in the past?

Mr. ROBINSON. Well, the others we knew about, and knew people who had had dealings with them. For instance, Bates & Rogers, in this engaged railroad work, had one of the cantonments; and they were one of the concerns that pushed us the hardest in connection with that cantonment work; and that is the way we got acquainted with them.

Senator JOHNSON. Did you on any occasion, in making subcontracts, let them by bids?

Mr. ROBINSON. There was no time for doing that; there was no time for getting up plans or getting up specifications, so that anybody could bid intelligently on the work.

Senator JOHNSON. Was there any occasion when you called for bids for any of the subcontracts?

Mr. ROBINSON. On purchase contracts; yes; for materials of all sorts and kinds. I do not want to say that as a general thing, or to answer your question, Yes, because it might be interpreted in a broader way than you intend it; it depends on what your definition of a subcontract is.

Senator JOHNSON. What I mean is, did you let your subcontracts without calling for bids at all, you yourselves selecting the subcontractors?

Mr. ROBINSON. Yes.

Senator JOHNSON. But you did, when you desired material, call for bids; is that correct?

Mr. ROBINSON. Yes; we tried to get at least three bids on it before any purchase was made. Of course, the major items, like boilers and turbines, and things of that sort, were practically handled by the Emergency Fleet Corporation, purchasing department, here in Washington.

Senator JOHNSON. But for the materials, you sought to get bids, did you?

Mr. ROBINSON. Yes. In fact, I think our instructions were to have at least three bids where it was possible to get them.

Senator JOHNSON. You say there was no time to bid intelligently upon the subcontracts?

Mr. ROBINSON. There was no time to get detailed plans and specifications upon which a man would be willing to undertake the work, on anything but this form of contract—that is, the fee basis. Because that work was some of the first work to start—in fact, before we had the design completed, we had all the different contractors in; we made up the roughest kind of estimate of what that work was going to cost, and got them to start their equipment to work just as soon as possible. One of the first things we did was to get those contracts under way.

Senator JOHNSON. How long were you on the works at Hog Island?

Mr. ROBINSON. At Hog Island?

Senator JOHNSON. Yes.

Mr. ROBINSON. I can not say. I spent most of my time in Philadelphia where the general offices have been.

Senator JOHNSON. Yes. The fact of the matter is that your specific office is in the city of Philadelphia, is it not?

Mr. ROBINSON. Yes. We had to locate everything there in the beginning, because transportation facilities were such that we did not want anything down there at Hog Island that it was not absolutely necessary to put there.

Senator JOHNSON. How often did you go to Hog Island?

Mr. ROBINSON. I could not tell you that.

Senator JOHNSON. Well, as near as you can tell? Was it once a week?

Mr. ROBINSON. I should say yes, about once a week; perhaps not as often; because in the early stages it was a matter of getting the organization and getting the plans.

Senator JOHNSON. Would you say that at that time you had been there as much as once in two weeks?

Mr. ROBINSON. Yes; I should say that.

Senator JOHNSON. That would be substantially your approximation, would it?

Mr. ROBINSON. I have not attempted to keep any record of it.

Senator JOHNSON. I know, but I want to ascertain the intimate knowledge that you have, concerning which you have testified, as to Hog Island.

Mr. ROBINSON. Well, I should say at least that.

Senator JOHNSON. When you say "at least that," I want your best approximation of the number of times, or how often, you went to Hog Island, if you please.

Mr. ROBINSON. I have not attempted to keep any record of it at all. I should say at least as often as once in two weeks, if not oftener. I went down there whenever I considered that it was necessary to go down.

Senator JOHNSON. How long did you stay down to Hog Island?

Mr. ROBINSON. Sometimes all day; sometimes a matter of a few hours.

Senator JOHNSON. And sometimes a matter of a few minutes?

Mr. ROBINSON. No; it was too much trouble to get down there to stay only a few minutes when I went.

Senator JOHNSON. And when you went down there, did you go for a specific purpose, to see a specific individual?

Mr. ROBINSON. Yes; I went for a specific purpose; I went to go over matters with people who wanted to go over the things with me. Of course I have not been in particularly close connection with a lot of the detail of this work, and I do not pretend to be.

Senator JOHNSON. Well, that was what I thought; but I was not sure that that was a fact.

Mr. ROBINSON. Yes; but I am close enough to it, I think, to justify me in making any statement that I have made.

Senaor JOHNSON. Well, there was no question about that. There are a couple of gentlemen named Harris in your employment, are there not?

Mr. ROBINSON. Yes.

Senator JOHNSON. Do you know them?

Mr. ROBINSON. Only as I became acquainted with them since they came on the job. Some of my people have known them for a good many years.

Senator JOHNSON. Did you employ them?

Mr. ROBINSON. No; Mr. Goodenough employed them.

Senator JOHNSON. What was their occupation prior to their employment by you?

Mr. ROBINSON. So far as I know, they were in the second-hand machinery business. I think we have had dealings with them in the past in connection with construction machinery on jobs in the West.

Senator JOHNSON. One of them, I observe, has a salary of $1,000 a month.

Mr. ROBINSON. Yes.

Senator JOHNSON. What was his salary before he entered your employ?

Mr. ROBINSON. I have not any idea. He was in business for himself, and it was not a matter of salary with him.

Senator JOHNSON. Who selected him?

Mr. ROBINSON. I can not say.

Senator JOHNSON. What individual employed him?

Mr. ROBINSON. Mr. Goodenough hired him. Whether he came on of his own free will or whether Mr. Goodenough asked him to come on, I do not know. I can ask Mr. Goodenough about that.

Senator JOHNSON. The reason I have been asking you these questions is that you have been testifying about this organization and this ability, experience, and the like.

Mr. ROBINSON. Yes.

Senator JOHNSON (continuing). And here is a gentleman who has been receiving $1,000 a month salary as a works manager.

Mr. ROBINSON. Yes.

Senator JOHNSON. And if you know nothing about that, I will accept that as conclusive.

Mr. ROBINSON. But I do know about the man who selected him. I have not selected every man in the organization.

Senator JOHNSON. Well, personally, did you know anything about Mr. Harris or about the reason for his selection?

Mr. ROBINSON. Yes.

Senator JOHNSON. All right. If you personally know about it state the fact.

Mr. ROBINSON. My understanding is that that is a man who has been experienced in that line of business. There are two of those men. They were in the machinery business; they had done well in that business. As I understand it, they wanted to serve; they wanted to come into this organization.

Senator JOHNSON. Possibly you did not understand my question. I say, personally, did you know about their selection or about the men themselves? You say you have an understanding of those, and so I ask you to state it.

Mr. ROBINSON. I mean that Mr. Goodenough and Mr. Muhlfeld both know them personally, and they told me about them.

Senator JOHNSON. After they were selected?

Mr. ROBINSON. In one case, I think, before selection.

Senator JOHNSON. Which was the one that they told you about before his selection?

Mr. ROBINSON. I think it was Birney Harris; that is my impression.

Senator JOHNSON. That is B. W. Harris, assistant to the works manager?

Mr. ROBINSON. Yes.

Senator JOHNSON. Are you not brought into constant contact with such an important official as the assistant to the works manager, employed at $1,000 a month?

Mr. ROBINSON. Very little. I have seen him a good many times, and met him a good many times.

Senator JOHNSON. Do you know Leo B. Harris, in charge of construction, at $625 a month?

Mr. ROBINSON. I have seen him a good many times.

Senator JOHNSON. What was his business before he entered your employ?

Mr. ROBINSON. I think they were both in the same business.

Senator JOHNSON. You say you "think they were both in the same business"?

Mr. ROBINSON. Yes, sir.

Senator JOHNSON. You did not know personally?

Mr. ROBINSON. I did not know personally.

Senator JOHNSON. In order to ascertain the facts as to that, we would have to get Mr. Goodenough on the stand, would we?

Mr. ROBINSON. Yes; or Mr. Muhlfeld.

Senator JOHNSON. Well, it happens that those two men are among those whose previous salaries are not stated in the list of overhead employees furnished to this committee.

Mr. ROBINSON. That is because they were in business for themselves, and had no salaries; and I think they would not care to disclose what their earnings were.

Senator NELSON. What business were they in before they entered your employ?

Mr. ROBINSON. They were in the second-hand machinery and construction machinery business, and that sort of thing.

Senator VARDAMAN. Where did they live?

Mr. ROBINSON. I think at Minneapolis or St. Paul, Minn.

The CHAIRMAN. The list on page 250 of the record shows that they were members of the firm known as the Manufacturers Supply Co., of Minneapolis, Minn.

Mr. ROBINSON. Yes; and our people got to know them at the time we were doing business in Minneapolis. We were building a power station in Minneapolis, and doing work at Taylors Falls; and we were operating in Minneapolis for some years; and it was in connection with those projects that our people got to know them.

Senator VARDAMAN. Did you have any business relation with those people in Minneapolis?

Mr. ROBINSON. Not that I know of.

Senator JOHNSON. There is a gentleman in your office named Gillette. Do you recall him?

Mr. ROBINSON. Yes.

Senator JOHNSON. What is his particular occupation?

Mr. ROBINSON. He is in charge of the placing of the steel orders with the fabricating mills.

Senator JOHNSON. He is described in the list, in the record of these hearings, as "Manager of hull construction." Would that be a correct designation?

and I think he met Admiral Capps down here. I think it more than likely that he was, but I would not say yes or no to that proposition.

Senator JOHNSON. Who first spoke to you with reference to any contract at Hog Island?

Mr. ROBINSON. What do you mean by that, Senator?

Senator JOHNSON. I mean who approached you in reference to going into this business transaction at all?

Mr. ROBINSON. I think Mr. Baldwin approached me in New York.

Senator JOHNSON. The gentlleman who sits behind you there [indicating]?

Mr. ROBINSON. Yes.

Senator JOHNSON. And where were you at the time the first suggestion was made to you?

Mr. ROBINSON. I was in New York City at the time.

Senator JOHNSON. What was the suggestion that was first made to you in regard to it?

Mr. ROBINSON. Mr. Baldwin, as I recollect, said that they had been figuring on a matter of fabricated boats and had been working on it for some time and discussing the matter with Gen. Goethals, and he wanted to know if he could interest me in the proposition. He said that he would like to have me associated with him.

Senator JOHNSON. About what time was that?

Mr. ROBINSON. I should say in June. I do not remember very definitely—the early part of June.

Senator JOHNSON. So far as you are aware, were you the first one connected with Stone & Webster who was spoken to in reference to the transaction?

Mr. ROBINSON. I presume, of course, that it had been discussed with Mr. Stone, who was president of the American International Corporation and also my partner.

Senator JOHNSON. Do you know whether or not Mr. Baldwin had discussed it with Mr. Stone at the time he spoke to you about it?

Mr. ROBINSON. I can not say at first-hand knowledge. I do not have any doubt that he had.

Senator JOHNSON. At the time you first had the consultation with Mr. Baldwin was anything said about the compensation to be paid by them?

Mr. ROBINSON. No; nothing whatever.

Senator JOHNSON. Are you sure of that?

Mr. ROBINSON. Do you mean to me?

Senator JOHNSON. Certainly.

Mr. ROBINSON. No.

Senator JOHNSON. Or to Stone & Webster?

Mr. ROBINSON. No.

Senator JOHNSON. Or to the American International?

Mr. ROBINSON. No: because he approached me as an individual at first.

Senator JOHNSON. Do you mean to say that when he came to you and asked you about this transaction in fabricated ships, that nothing was said about compensation?

Mr. ROBINSON. Nothing whatever.

Senator JOHNSON. Was there, on any occasion, at any time, anything said about the compensation to be given to the contractors?

Mr. ROBINSON. What do you mean by "the contractors"?

Mr. ROBINSON. It was not a percentage then, as I recollect; it was a matter of so much per ton.

Senator JOHNSON. And that would equal a percentage of what?

Mr. ROBINSON. It would depend on what the cost was.

Senator JOHNSON. Was it not a fact that you finally came down to an agreement of 5 per cent?

Mr. ROBINSON. I do not think it was exactly 5 per cent. My recollection of this would not be exact without looking up the records; but my recollection is that it ranged somewhere from $6 to $8 per ton, depending upon time and penalties and speed and some other things. Now, at that time I think they were estimating that the boat was going to cost around $150 a ton, and 5 per cent of that would be $7.50.

Senator JOHNSON. I recall to you your 10 per cent propositions that were made with Gen. Goethals, and that subsequently, although the contract was by no means completed at all, you came down to about 5 per cent. Do you not recall that?

Mr. ROBINSON. I am trying to tell you as near as I can. No; I do not recall the terms of that contract as it was left.

Senator JOHNSON. Well, is it not substantially the fact?

Mr. ROBINSON. I think so: approximately: yes.

Senator JOHNSON. Well, is it not a fact that after that time Admiral Capps, in negotiations with you, reduced it to substantially [illegible] per cent?

Mr. ROBINSON. Well, the normal fee under our contract is 5 per cent. The minimum fee is approximately [illegible] per cent and the maximum fee would be something over 5 per cent.

Senator JOHNSON. During the time that you were negotiating and coming from 10 per cent to 5 per cent, there were conferences between you and your associates of the American International Corporation, were there not?

Mr. ROBINSON. Yes.

Senator JOHNSON. All right. [illegible] ing that time, did you not [illegible] titled to so high a percentage?

Mr. ROBINSON. I do not [illegible] were trading the thing out. [illegible] form of contract than I [illegible] cussion of compensation [illegible] end of things.

Senator JOHNSON. Do you mean [illegible] tion to the compensation [illegible]

Mr. ROBINSON. No. But I [illegible] tions toward the end of it.

Senator JOHNSON. With whom [illegible] the negotiations?

Mr. ROBINSON. With Gen. [illegible]

Senator JOHNSON. With whom?

Mr. ROBINSON. With Mr. [illegible]

Mr. ROBINSON. I do not believe I could answer that offhand, because there were some propositions that had been worked over and presented, I think, before I came into it; and it never was my opinion that any such basis would ever be gotten.

Senator VARDAMAN. What were those propositions?

Mr. ROBINSON. I do not know.

Senator VARDAMAN. Well, you said that there were other propositions.

Mr. ROBINSON. I understood there were.

Senator JOHNSON. Were you in the negotiations at all at the first?

Mr. ROBINSON. I was with Mr. Baldwin after we made an arrangement to go into it—not any definite arrangement, but we went along, and they wanted me to go into it, and I put some personal work into it, as I was accustomed to do, on account of Mr. Stone's relations there.

Senator JOHNSON. When working it out, did you state the compensation that you desired?

Mr. ROBINSON. Well, different amounts—the thing that I was looking at more than compensation was the form of contract.

Senator JOHNSON. I asked, in working this out, did you state the amount of compensation you would ask of the Government?

Mr. ROBINSON. I think there were different amounts stated, but I do not remember what they were.

Senator JOHNSON. Is it not a fact that you started with 10 per cent?

Mr. ROBINSON. I think that was the original proposition.

Senator JOHNSON. Then did you not come down?

Mr. ROBINSON. Yes; but as I told you before, personally I never thought they would get 10 per cent, or were justified in getting 10 per cent; there was not any expectation of getting 10 per cent; but it was just to start the negotiations.

Senator JOHNSON. Did you tell Mr. Baldwin that you did not think you were justified in asking 10 per cent?

Mr. ROBINSON. I think perhaps I did.

Senator JOHNSON. What did he say?

Mr. ROBINSON. I do not remember.

Senator JOHNSON. Well, there must have been some discussion. You said, in substance, "Mr. Baldwin, you are not entitled at this time to 10 per cent." Now, what did Mr. Baldwin say about that?

Mr. ROBINSON. I do not think I put it in just that way.

Senator JOHNSON. Well, put it in any way you like.

Mr. ROBINSON. I have not a distinct recollection of all the stages of the negotiations. That was a good while ago.

Senator JOHNSON. I am asking you if you do not recall any statement that he made at that time. If you do not, I will pass to another subject.

Mr. ROBINSON. I do not recall any statement that he made.

Senator JOHNSON. Do you recall anything that passed finally concerning the compensation that was to be paid by the Government?

Mr. ROBINSON. No; I do not think we had. I think we had just reached a conclusion in the matter when the difficulties in the Shipping Board began.

Senator JOHNSON. Do you know the percentage that you were asking when you say you were coming down to a conclusion?

Mr. ROBINSON. It was not a percentage then, as I recollect; it was a matter of so much per ton.

Senator JOHNSON. And that would equal a percentage of what?

Mr. ROBINSON. It would depend on what the cost was.

Senator JOHNSON. Was it not a fact that you finally came down to an agreement of 5 per cent?

Mr. ROBINSON. I do not think it was exactly 5 per cent. My recollection of this would not be exact without looking up the records; but my recollection is that it ranged somewhere from $6 to $8 per ton, depending upon time and penalties and speed and some other things. Now, at that time I think they were estimating that the boat was going to cost around $150 a ton, and 5 per cent of that would be $7.50.

Senator JOHNSON. I recall to you your 10 per cent propositions that were made with Gen. Goethals, and that subsequently, although the contract was by no means completed at all, you came down to about 5 per cent. Do you not recall that?

Mr. ROBINSON. I am trying to tell you as near as I can. No; I do not recall the terms of that contract as it was left.

Senator JOHNSON. Well, is it not substantially the fact?

Mr. ROBINSON. I think so; approximately; yes.

Senator JOHNSON. Well, is it not a fact that after that time Admiral Capps, in negotiations with you, reduced it to substantially 4 per cent?

Mr. ROBINSON. Well, the normal fee under our contract is 5 per cent. The minimum fee is approximately 4 per cent and the maximum fee would be something over 5 per cent.

Senator JOHNSON. During the time that you were negotiating and coming from 10 per cent to 5 per cent, there were constant conferences between you and your associates of the American International Corporation, were there not?

Mr. ROBINSON. Yes.

Senator JOHNSON. All right. You said to them, repeatedly, during that time, did you not, that you did not think they were entitled to so high a percentage?

Mr. ROBINSON. I do not know that I said that repeatedly. We were trading the thing out, and I was paying more attention to the form of contract than I was to the compensation, because the discussion of compensation takes place when you get down to the tail end of things.

Senator JOHNSON. Do you mean that they were paying less attention to the compensation than they were to the form of contract?

Mr. ROBINSON. No. But I was carrying on the bulk of the negotiations toward the end of it.

Senator JOHNSON. With whom were you carrying on the bulk of the negotiations?

Mr. ROBINSON. With Gen. Goethals's attorneys.

Senator JOHNSON. With whom?

Mr. ROBINSON. With Mr. Cotton, Mr. Burling, Mr. Howland, and Mr. Rublee. Principally with Mr. Cotton, but usually there were three or four of them sitting in in the conferences.

Senator JOHNSON. What, if anything, did the American International representatives, Mr. Baldwin, or any of the others, say concerning the compensation when you were saying to them that you thought they were not entitled to 10 per cent?

Mr. ROBINSON. Well, I think they really thought much the same way about it that I did.

Senator JOHNSON. And yet they asked it, did they?

Mr. ROBINSON. They started out that way.

Senator VARDAMAN. That was when their patriotism was at the highest point, was it not? [Laughter.]

Senator JOHNSON. You said to the committee yesterday—and it is because of that answer on your part that I have been asking you these questions—that Admiral Capps gave his ideas of the compensation, and that you accepted them. Do you remember that?

Mr. ROBINSON. I think we did.

Senator JOHNSON. Is it not a fact that you only accepted them after months of negotiation, when you came down from 10 per cent to 5 per cent?

Mr. ROBINSON. I would not consider it so, because I considered that negotiations began over again with Admiral Capps. He had no obligation to pay any attention to what went on before he came in.

Senator JOHNSON. Well, you had a month and a half of negotiations before Gen. Goethals retired, did you not?

Mr. ROBINSON. I do not know.

Senator JOHNSON. The date of his retirement, in order that you may know, was July 26, 1917.

Mr. ROBINSON. I should say probably so.

Senator JOHNSON. And after his retirement you had substantially a month and a half of negotiations with Admiral Capps, did you not?

Mr. ROBINSON. Practically a month; a little over a month.

Senator JOHNSON. Practically a month and a half?

Mr. ROBINSON. We started in the early part of August and got through in the middle of September.

Senator JOHNSON. You do not want to convey to us the impression, do you, that you accepted forthwith the suggestion of the Government as to the compensation you were to have?

Mr. ROBINSON. I think we practically did that, so far as Admiral Capps was concerned.

Senator JOHNSON. Well, that was after you had "fussed" down from 10 per cent, was it not?

Mr. ROBINSON. Well, we had been working on that.

Senator JOHNSON. So that you only accepted that because it was all you could get, was it not?

Mr. ROBINSON. I do not think so, particularly; we thought that Admiral Capps had ideas about the proposition, and he thought that was the proper fee.

Senator JOHNSON. And he stuck to his idea?

Mr. ROBINSON. We accepted his idea.

Senator JOHNSON. And he would not go above it, would he?

Mr. ROBINSON. No.

Senator JOHNSON. And your people wanted 10 per cent?

Mr. ROBINSON. We never asked for a 10 per cent contract.

Senator JOHNSON. You asked for a 10 per cent contract until you were told that you could not get it, did you not?

Mr. ROBINSON. I do not know of my own knowledge. I would not say that we ever started out with any other idea than that with which people usually start out to make a contract. I frequently start out to get 10 per cent on a contract, but I do not end up that way.

Senator JOHNSON. Well, fortunately so—in the present case—you did not get it here. But what I am driving home on this proposition is, that you started with the idea of getting as much as you thought you could get, and you went down until you took what you were finally told was all you could get. Is that not about the situation?

Mr. ROBINSON. It might be stated that way.

Senator JOHNSON. Yes. Have you anything to do with the Submarine Boat Corporation at all?

Mr. ROBINSON. Nothing whatever.

Senator JOHNSON. Do you know whether or not any of the financial backers of the American International Corporation are interested in the Submarine Boat Corporation?

Mr. ROBINSON. No.

Senator JOHNSON. Do you mean they are not interested or that you do not know?

Mr. ROBINSON. I do not.

Senator JOHNSON. Well, I take it—and then I will not pursue that line of inquiry any further—that personally you are not familiar with the affairs of the American International Corporation?

Mr. ROBINSON. No.

Senator JOHNSON. You know nothing of its stockholders or its ramifications, or the like?

Mr. ROBINSON. Practically nothing.

Senator JOHNSON. Do you remember, in the beginning of your talks and your negotiations with the American International Corporation, anything being said about the mobilization of the industries of the Nation?

Mr. ROBINSON. I do not know what you mean by that, Senator. Of course, that was the idea of this fabricated boat was practically what you might call a mobilization, not of the industries, but of the fabricating plants, and the manufacturing plants, and utilizing existing organizations and existing plants, rather than trying to assemble them at a place like this.

Senator JOHNSON. Was it said, between you and your associates of the American International Corporation, that your relations to the various industrial plants of the country were such that you would not only be able to perform this contract but be able to perform it as no other organization could perform it in the country?

Mr. ROBINSON. I do not know that any such statement was made.

Senator JOHNSON. Do you know whether or not at the time of your negotiations with the Emergency Fleet Corporation such statements were made to the Emergency Fleet Corporation?

Mr. ROBINSON. No; I do not.

Senator JOHNSON. Were you present at any time when a statement was made to the Emergency Fleet Corporation that the industries of the country—I will state exactly the words that I want the answer to use—that the industries of the country had been mobilized by the American International Corporation and by the corporations with which it was affiliated and associated, and that it alone could fill and perform such a contract as this?

Mr. ROBINSON. I do not know.

Senator JOHNSON. Do you recall in substance that statement being made?

Mr. ROBINSON. No; I do not.

Senator JOHNSON. With whom did you negotiate in the beginning of these matters?

Mr. ROBINSON. With Mr. Cotton.

Senator JOHNSON. With Mr. Cotton alone?

Mr. ROBINSON. Yes.

Senator JOHNSON. Were you in Washington negotiating with any members of the Shipping Board or the Emergency Fleet Corporation?

Mr. ROBINSON. The early negotiations were in New York, in Mr. Cotton's office.

Senator JOHNSON. Alone with him?

Mr. ROBINSON. Before he came down here; and when he came down here and the staff was organized, we negotiated with the four gentlemen that I named.

Senator JOHNSON. You negotiated with whom?

Mr. ROBINSON. The four gentlemen I have named.

Senator JOHNSON. The four attorneys whom you have named?

Mr. ROBINSON. Yes.

Senator JOHNSON. Did you personally at any time negotiate with any members of the Fleet Corporation or any members of the Shipping Board?

Mr. ROBINSON. No; I would say not.

Senator JOHNSON. Do you recall personally having a conversation with any members of the Fleet Corporation or any members of the Shipping Board—first we will take it prior to the retirement of Gen. Goethals?

Mr. ROBINSON. I do not remember ever discussing the steel-ship proposition with anybody except——

Senator JOHNSON (interposing). Who was the individual who did discuss the particular matter?

Mr. ROBINSON. In the early stages I understood that Mr. Baldwin and possibly Mr. Connick had had some discussion with Gen. Goethals.

Senator JOHNSON. Did you know at any time of any differences that Mr. Connick and that Mr. Baldwin had with any of the members of the Shipping Board or any of the members of the Fleet Corporation?

Mr. ROBINSON. No.

Senator JOHNSON. Was it conveyed to you on any occasion that there had been any differences in relation to requests that had been made of Mr. Connick to furnish certain data to the Shipping Board?

Mr. ROBINSON. I do not know what you mean, Senator.

Senator JOHNSON. Do you know whether any requests had been made to Mr. Connick to furnish certain data to the Shipping Board?

Mr. ROBINSON. No.

Senator JOHNSON. You do not personally know of any such matters?

Mr. ROBINSON. No.

Senator JOHNSON. Do you personally, Mr. Robinson, determine the policy of Stone & Webster?

Mr. ROBINSON. No; I do not.

Senator JOHNSON. Who does?

Mr. ROBINSON. As a partner there I have a voice in it; it is usually determined by a firm meeting—a meeting of the various members of the firm. I have to do more with the construction and engineering end of the business, and along the lines laid down, even, I would not say that I entirely directed the policy of that end of the business, but pretty nearly so. I am discussing it with my partners from time to time.

Senator JOHNSON. Who is the controlling and directing spirit, Mr. Stone or yourself, or are those matters not determined by any individual?

Mr. ROBINSON. Well, practically not. The original firm was Mr. Stone and Mr. Webster; and then they took in Mr. Robb, and he had an interest in it; and then Mr. Bradley went in, and Mr. Wadsworth, and Mr. Hallowell and I went in. And the matters were discussed among the firm. Of course, we have always looked to Mr. Stone and Mr. Webster as the senior partners.

Senator JOHNSON. Well, if there is a matter of policy at Hog Island to be determined for Stone & Webster, do you deterine it?

Mr. ROBINSON. Yes.

Senator JOHNSON. That is absolute, is it not?

Mr. ROBINSON. Yes. Of course, if it is a very serious matter, I would discuss it with them; but in the ordinary run of conditions I would determine it.

Senator JOHNSON. You state that the subcontracts that had been let for work there, as I recall it, did not exceed 30 per cent of the work outside of the building of the ships themselves?

Mr. ROBINSON. I think I said from 30 to 50 per cent, as far as I could roughly figure.

Senator JOHNSON. And that would be your answer to-day in that regard, would it?

Mr. ROBINSON. Well, from such figures as I have been able to rough out since then, I should say around 40 per cent, which is about midway of my estimate.

Senator JOHNSON. About 40 per cent?

Mr. ROBINSON. Yes.

Senator JOHNSON. What did you understand that the Government contracted for with you with reference to your organization, the "know how," as Admiral Bowles put it—your experience and the like?

Mr. ROBINSON. My understanding was that, just like any of the other jobs that we had been doing for years for a great many people, we were given the undertaking to handle and to organize; not only did we provide the "know how," but we provided the ability to do it.

Senator JOHNSON. And all of the "know how" and all of the ability to do it?

Mr. ROBINSON. Yes; certainly.

Senator JOHNSON. Is that correct?

Mr. ROBINSON. We were perfectly capable of doing it. The matter of subcontracting is a matter of policy under the conditions that obtain at any particular time or on any particular job. There was no representation ever made, Senator, that we expected to go up there and do every bit of the work ourselves.

Senator JOHNSON. Well, I did not mean that you were to perform the manual labor.

Mr. ROBINSON. I did not mean that, either; I mean the work of the Stone & Webster organization.

Senator JOHNSON. Well, was there any reservation as to the amount of "know how" you were to furnish?

Mr. ROBINSON. No.

Senator JOHNSON. It was to be all the "know how" around the establishment, was it?

Mr. ROBINSON. The ability to do this job; yes, sir.

Senator JOHNSON. Well, you entered into another contract in December, did you not, concerning the payment of your engineering and technical force?

Mr. ROBINSON. Merely an intermittent force. For instance, if had a man come down from Boston, as we did, to work on these contracts because he was particularly fitted to do that, and he was down there a week or so, he would be paid on a certain basis. That basis was to be twice what his salary was, which is cost to Stone & Webster as closely as you can figure it.

Senator JOHNSON. At any rate, he would be paid twice what his salary was, would he not?

Mr. ROBINSON. He would not; Stone & Webster would.

Senator JOHNSON. Stone & Webster would be paid twice what his salary was, would they not?

Mr. ROBINSON. Yes.

Senator JOHNSON. And then Stone & Webster would pay half that amount to the individual?

Mr. ROBINSON. Yes.

Senator JOHNSON. Now, what part of the "know how" did those individuals possess?

Mr. ROBINSON. Well, you can not split it off into bits in that way. We called, for instance, on———

Senator JOHNSON (interposing). We did split that into bits unfortunately; we contracted for all the "know how"; we have demonstrated that. Part of the "know how" that was in the subcontracts we had to contract for again. Then, in December——

Mr. ROBINSON (interposing). Not because we did not have "know how," but it was a question of getting an organization of sufficient size and getting sufficient equipment quickly onto this job to do it with the speed that the necessities required.

Senator JOHNSON. No; but you specifically contracted for the "know how," just as the Government did in your original contract; do you not recall the engineering skill, the technical ability, and the like? You specifically contracted for that "knew how" just as the Government contracted for it with you?

Mr. ROBINSON. Now, you are referring to this other contract.

Senator JOHNSON. I am now referring to your subcontract.

Mr. ROBINSON. Of course that was a matter of no moment at all, because the service under that does not amount to anything in duration; it is just a question of whether you take a man like that and put him on the pay roll all the time when he is not needed there all the time, or hire him for a few days at a slightly higher rate or perhaps double the rate you would have to pay for him if he was

[illegible] there all the time and it was a matter of getting the particular part of the work done for the government for the less amount of money.

Senator JOHNSON. I am not [illegible] I might differ with you in your opinion.

Mr. ROBINSON. It was [illegible] that was all.

Senator JOHNSON. I [illegible] "know how." He was not.

Mr. ROBINSON. No; I would not say that.

Senator JOHNSON. For your services very substantially the same as the original contract, were they not?

Mr. ROBINSON. It was a contract for a certain part of the work on a basis that [illegible] if we had placed the same [illegible] of the work.

Senator JOHNSON. [illegible] You contracted for the engineering [illegible] necessary; you contracted for a [illegible] engineering ability and experience [illegible]

Mr. ROBINSON. That contract was not for the purpose of paying for [illegible] they mean nothing whatever.

Senator JOHNSON. For the purpose of [illegible] "know how" of the subcontractors to some [illegible] you paid for [illegible] you not?

Mr. ROBINSON. In these subcontracts?

Senator JOHNSON. Yes.

Mr. ROBINSON. Certainly.

Senator JOHNSON. You made another contract then with Stone & Webster, in December, [illegible] contracted for the [illegible] of certain specific [illegible] certain technical knowledge. Did you not?

Mr. ROBINSON. Yes.

Senator JOHNSON. That is correct, is it not?

Mr. ROBINSON. If you want to put it that way.

Senator JOHNSON. I do not want to put it that way. I want to put it just exactly according to the fact.

Senator HARDING. May I interrupt you just there with a question?

Senator JOHNSON. Certainly.

Senator HARDING. In regard to this know how record, I want to ask you a question, Mr. Robinson. When you say 40 per cent of the work was subcontracted, you mean 40 per cent in the case of the yard?

Mr. ROBINSON. Yes; 40 per cent of the value.

Senator HARDING. In other words, if the yard cost $16,000,000 $16,000,000 would be represented in subcontracts?

Mr. ROBINSON. Yes.

Senator HARDING. And you were paid 5 per cent on that?

Mr. ROBINSON. Yes; I would not say that. The 5 per cent might be in the $16,000,000, might include the fee.

Senator HARDING. In round numbers, we pay for the "subknow how" $800,000; is that the inference to be drawn?

Mr. ROBINSON. That would be the correct inference to be drawn from the illustration as you state it. As a matter of fact, however, the total fees of the subcontractors amount to approximately $400,000, inasmuch as they were based on work estimated to cost about $8,000,000, and their fees will be no larger even though the cost of that part of the work may exceed the $8,000,000. But that is not a question of "subknow how," Senator, because that puts it in a way that would not really express what you mean. If we had had time to have gotten out complete plans and specifications for this work and called for bids, all those expenses that are paid for are bound to be in the contractor's bid, plus any profit that he expected to get. Merely another way of reaching the same end, that is all. You can call it "know how," you can call it "experience," you can call it "organization," or you can name it in a number of different ways just as you please.

Senator HARDING. The fault I can find with you, if I can find any and make myself clear, is that you have not only paid the Government money, and paid manifestly a very liberal rental for equipment but you come along on top of that and pay $800,000 for the know how of the man who owned this equipment.

Mr. ROBINSON. No; they put in their experience there. If we had not had them on the job we would have had to have hired a lot of other high-priced men to handle that particular part of the work they are tackling.

Senator HARDING. That is quite apart from it. You do pay that anyhow?

Mr. ROBINSON. No; we get the experience of those men, and the fact that they know where to get their organization and men who can work together and do that work enough more economically than a green outfit would justify what we might pay them for doing it.

Senator HARDING. Let me see if I understand that correctly——

Senator NELSON (interposing). Senator, I think you are laboring under a misapprehension. It appears that Stone & Webster and this International Co. have not got all of the engineering knowledge and all the know how, but that they have got to get some from outsiders.

Mr. ROBINSON. That is very true, Senator. We never made any pretensions as to having it all.

Senator HARDING. I do not think my apprehension is wrong on that. I will make a case in order to get at what I have in mind.

Mr. ROBINSON. Yes.

Senator HARDING. Suppose I am the Harding Contracting Co.

Mr. ROBINSON. Yes.

Senator HARDING. And I have in my organization three pile drivers, we will say, and I bring these pile drivers to your assistance, and you pay my forces that bring them—my foreman and all that. You pay me under these contracts a generous compensation for my pile drivers.

Mr. ROBINSON. Pay the usual price.

Senator HARDING. We will say the generous price, if it is 20 per cent in four months. Then, in addition to that, I, the contracting company, get 5 per cent on whatever the estimate of the job is for my bringing you this agency of operation.

Mr. ROBINSON. Furnishing your services and your experience and the assembling of your organization quickly together, and the general management of it and seeing that the work is done properly.

Senator HARDING. Mr. Robinson, if you were conducting an ordinary contract would you think it a perfectly proper contract and not excessive in compensation?

Mr. ROBINSON. Yes, Senator; because we have done that in our work. It is ordinary practice to do it. There is nothing unusual about it.

Senator HARDING. Is it not the practice in contracting, where you engage with a fee a man who has an equipment, that the fee includes the equipment as well?

Mr. ROBINSON. Sometimes it does and sometimes it does not. On the work we do for people we do not carry any equipment. The equipment that is necessary to do the job is bought for the job and is sold at the end of the job, and the difference in cost goes in as a part of the cost. We have handled millions of dollars worth of work a year on that basis. We do not carry any equipment. A great many contractors do, but we never made a practice of it, because if we carried it we would have to figure it into our fees, what it cost to carry it, depreciation on it, time when it is idle, and all that sort of thing; and in our opinion the fairest way to handle the thing by and large is the way we usually handle it in our practice.

Senator RANSDELL. Mr. Robinson, does the International Co. get any commission on the cost of the yard in addition to this 5 per cent which the contractor gets?

Mr. ROBINSON. No; we get no fee whatever for building the yard.

Senator RANSDELL. You are not paid any compensation whatsoever for the cost of the yard?

Mr. ROBINSON. None whatever. We are merely paid a fee, dependent on the construction of boats. When a boat is half done we earn half of the fee for that particular boat; when she is accepted we get the other half. And we have no compensation whatever on the cost of the yard. But I want to say this, that even if we had, it would be perfectly usual practice to do exactly what we have done in subletting this work.

Senator VARDAMAN. In the original contract, is it not understood that there shall be no commission or fee paid in the construction of the yard or the plant?

Mr. ROBINSON. No——

Senator VARDAMAN. When we negotiated with the Emergency Fleet Corporation, was it not understood originally that there shall be no fee paid in the construction of the plant?

Mr. ROBINSON. No: I would not say that, Senator. There was none in the contract to us for it, but the question of subletting the work and that sort of thing I think has always been understood from the first.

Senator VARDAMAN. Did not the contracts you first made contain the understanding that the direction in the construction was the "know how" that the Emergency Fleet Corporation was buying from you that would be paid in the construction of the ships?

Mr. ROBINSON. I did not get the first part of your question.

Senator VARDAMAN. I said that in the original agreement it was understood, I understand, that there was to be no fees paid for the construction of the plant.

Mr. ROBINSON. Not to us.

Senator VARDAMAN. Not to you? Do you not think that the officers of the Government with whom you negotiated understood that the "know how" which they were buying and paying you for was to be used in the construction of the plant, the Government paying all the expenses?

Mr. ROBINSON. Yes; in the construction of the plant in the speediest possible way it was necessary to get some of the work done for you.

Senator VARDAMAN. The procedure that you finally adopted was a matter of secondary consideration?

Mr. ROBINSON. No; we always had in mind and my impression was that the subject was discussed with the people that that was the way the matter was to be done, by calling on capable contractors.

Senator JOHNSON. Are you not mistaken in making it a divisible contract? It is not accurate to say you were not to be paid for the construction of the yard. The fee you were to be paid was for the construction of the yard and the construction of ships; is not that correct?

Mr. ROBINSON. No; I would not say so, Senator, because we get a fee of so much per vessel. The original contract called for 50 vessels.

Senator JOHNSON. Do you get a fee for so much per vessel for constructing the yard and constructing the vessels?

Mr. ROBINSON. No; I would not analyze it that way—if this contract had originally been made—the contract is made for 50 vessels, with the privilege of the Government increasing that.

Senator JOHNSON. That was increased subsequently?

Mr. ROBINSON. It was increased subsequently, but not to the maximum amount originally contemplated when the negotiations began, and I would not divide it that way. I would not say that we had any fee for the yard. In fact, it was discussed we were not to get a fee for the yard, and in fact, the fee was based on the value of the vessels.

Senator JOHNSON. Of course, it is based on the value of the vessels, but you were ordered to construct the yard in order to obtain the fee for the construction of the vessels?

Mr. ROBINSON. Yes.

Senator JOHNSON. It is not a divisible contract. You are not asserting here that there was no obligation on you to construct this yard?

Mr. ROBINSON. Not at all. I am not making that assertion, Senator. On the other hand, I am stating it was a divisible contract, from the fact we never received any compensation for building the yard and never understood that we did.

Senator VARDAMAN. Do you know anything about the fees that are paid to other shipbuilding companies for the construction of ships?

Mr. ROBINSON. Why——

Senator VARDAMAN (interposing). Are your contracts similar to those?

Mr. ROBINSON. I think there were contracts made similar to ours, Senator, according to my understanding, although I have never seen the contracts.

Senator VARDAMAN. You understand that.

Mr. ROBINSON. Yes.

Senator VARDAMAN. The Government paid nothing for the construction of those plants that had already been erected, and therefore you, I suppose, were put on the same basis that you would have been if the plant had already been constructed?

Mr. ROBINSON. No; if the plant had been constructed and we owned the plant, of course that would have been taken into consideration in connection with the fee we got for the vessels, as was done in some cases.

The CHAIRMAN. When you entered into negotiations it was the understanding that the yard would have to be built?

Mr. ROBINSON. Certainly; that was a part of the work, that we were to build the yard; but the contract contemplated a varying amount of vessels at practically the same fee. Therefore, I do not see how you can consider that part of the fee was earned for constructing the yard, because if a fee for building the yard was contained in the fee we got for the first 50 boats—which was the original number of boats in the contract—then we are going to get a fee for the yard again with the next 50 boats and a fee for the yard again with the next 50 boats, and so on. So I have always understood it was evident there was no fee attached to building the yard. Manifestly, if a fee for building the yard was contained in the fee for building the first 50 boats, the fee for subsequent boats of the same type should have been materially lower, but this was not the case. As a matter of fact if the work were to stop to-day or the contract be terminated, we should receive no fee for the work to date.

Senator JOHNSON. No specific fee. The fee was measured by the prices paid for the vessels to you. You have got an erroneous idea, which is immaterial, so far as that is concerned, for the contract speaks for itself. It is not a divisible contract. It is a contract where you undertake to do certain things and receive certain compensation. The measure of that compensation was a certain sum for each vessel. That is, I think, an accurate statement of the legal aspects of the contract, at least.

Mr. ROBINSON. But would you not agree with me, Senator, that if any part of that compensation for the boat was considered as attaching to the yard, that then every time we built 50 vessels we again get paid for the yard?

Senator JOHNSON. Certainly not.

Mr. ROBINSON. I do not see why. It is a poor rule which does not work both ways.

Senator JOHNSON. The contract speaks for itself, and it is useless to discuss its legal aspects, I think.

The CHAIRMAN. Did you ever see the yard at Bristol, Mr. Robinson?

Mr. ROBINSON. No; I have never seen that.

The CHAIRMAN. Or at Newark?

Mr. ROBINSON. I understand this was on the same basis so far as contract; in fact, the three contracts were under discussion at the same time, and I think with certain modifications the contract with us was practically used as a standard for those others.

Senator JOHNSON. How large a proportion of the work of construction of the ships is done within the yard and without?

Mr. ROBINSON. We hope to get up around 85 to 90 per cent of the fabricating done outside the yard. That depends somewhat upon how it works out.

Senator JOHNSON. Eighty-five or ninety per cent of the fabricating outside the yard?

Mr. ROBINSON. What I mean by that is, some of the sheets and things of that sort we will have to form in our own yard, and others we will get from fabricating plants near by.

Senator JOHNSON. Take the actual work of putting the sheets together in the yard; if you can give me an estimate, do. The amount of the building of the ship in the yard and the amount of the building of the ship outside the yard.

Mr. ROBINSON. I have not any way to give you an estimate on that.

Senator JOHNSON. I am inclined to think that Mr. Baldwin said 60 and 40. Would that be an accurate statement—60 per cent to be done in the yard and 40 per cent outside?

Mr. ROBINSON. I have no idea whatever; no first-hand knowledge.

Senator JOHNSON. You could not give an estimate?

Mr. ROBINSON. No, sir.

Senator JOHNSON. Why could you not give an estimate?

Mr. ROBINSON. I have not paid any attention to the ship end of this except to see it was getting the proper attention from the proper parties.

Senator VARDAMAN. That is not a part of the "know how"?

Mr. ROBINSON. Yes; that is a part of the "know how"; that is the "know how" furnished by the New York Shipbuilding Corporation, Senator.

Senator JOHNSON. Did you at any time make any estimate of the cost of this shipyard?

Mr. ROBINSON. I do not think you would really call it an estimate; no.

Senator JOHNSON. Call it what you please. Did you participate in any combination of figures or in any computation which would indicate the cost of the yard?

Mr. ROBINSON. Personally, no. Some of our engineers and other men got up in a very short time—as has been explained here—some figures with refrence to the expectations.

Senator JOHNSON. Who were the engineers who got up that estimate?

Mr. ROBINSON. I think that Mr. Manning had to do with it, and others of his assistants. I can not say out of hand. I think Mr. Goodenough probably had something to do with it also. He was chief engineer at the time.

Senator JOHNSON. Do you know whether, subsequently, any estimates were made at the time by you or by your force?

Mr. ROBINSON. Early in November there were some changes made in the figures that we had, more or less based on some information

that we had had about the conditions there or the scope of the work had been changed in some particulars, and about that time we were requested for some figures regarding the cost on account of the Fleet Corporation wanting to take up the matter of appropriation with Congress, and there were some figures handed them at that time. They were also told those figures were not of any degree of accuracy, because a lot of the undertaking was still undetermined.

Senator JOHNSON. Is it not a fact that in October your engineers made another estimate of the cost of this work?

Mr. ROBINSON. I say they made some figures that in the light of the information and the progress of the work and the design and the development and the examination of certain features of it—an indication of the roughest kind of what the cost might be at that time, and at that time we had been given——

Senator JOHNSON (interposing). Then you had not made any estimate of the work in October?

Mr. ROBINSON. I would not call it an estimate in a sense that it was based on detailed quantities, which any estimate to be of value must be based on.

Senator JOHNSON. Mr. Robinson, did not pass through your office and did you not transmit to the Emergency Fleet Corporation an estimate of the work by your engineers in October last?

Mr. ROBINSON. Yes; and we told at the same time exactly what we thought of it.

Senator JOHNSON. I am not asking you what you told them. Let me state it again, if you wish it again, but I have asked you now—pardon me for the insistence, but I was trying to get it accurately—four times, if in October you did not make an estimate of this work, and you simply now finally answer, "Yes; they did." If you want to make any explanation of it you are at liberty to do that.

Mr. ROBINSON. I do want to make this explanation, that that was based on very little more information regarding the matter than we had at the time the first figures were put together, when we had no detailed information at all. At that time we had been given the 70 boats, the 70 B boats to be built, which meant another storage yard and more railroad trackage and a few things that were self-evident, and the figures were lifted on that account, but there was a great deal of detailed information and detail layout here that had not been made at that time nor had we any opportunity to make a detailed layout up to that time.

Senator JOHNSON. Did you submit that estimate yourself to the Emergency Fleet Corporation?

Mr. ROBINSON. We transmitted it to them.

Senator JOHNSON. In writing?

Mr. ROBINSON. At their request—yes; in writing, and at the same time we saw Admiral Rousseau and told him exactly what we thought about it.

Senator JOHNSON. In the written estimate that you thus transmitted, did you say anything of the sort that you have said now to me?

Mr. ROBINSON. I think not in the letter of transmission, as I remember it. But practically simultaneously or within a day or two we discussed the whole question with Admiral Rousseau here in

Washington and told him exactly what we thought with reference to the situation.

Senator JOHNSON. Do you know whether or not orders have been given at this plant that the men there shall not talk to any of the members of this committee?

Mr. ROBINSON. None that I know of.

Senator JOHNSON. Are you aware of any suggestions that have been made to men there that they would get into trouble if they transmitted any information to this committee?

Mr. ROBINSON. No; I do not. On the contrary, I do not know of any job that has been more open to inspection from one end to the other—books and accounts and everything else—than this has, Senator. The Fleet Corporation's representatives have been right with us there in the office, had a part of the office, and access to all our books and figures and everything else.

Senator JOHNSON. Do you know anybody, not yourself but anybody else, has issued orders to the employees there not to talk?

Mr. ROBINSON. No; I do not. I do not believe any such orders have been issued.

Senator JOHNSON. That is all, Senator Nelson, that I desire to ask.

Senator NELSON. I do not think I want to ask any questions. I will wait till Mr. Goodenough comes here.

The CHAIRMAN. Tell us how far you have got along with the railroads and cars and the locomotives and equipment in the yard that you need. Have you finished all of the railroad tracks?

Mr. ROBINSON. No; we have, I think, about 50 miles out of some 65 or 70 miles. We have that matter well in hand.

The CHAIRMAN. Have you reduced the number of miles of railroad tracks in the yards from what you at first contemplated?

Mr. ROBINSON. Temporarily, at least, it has been reduced; some 12 miles, I should say, have been held up until the need has been demonstrated. Of course, they can be put in at any time.

The CHAIRMAN. Then, you have got an ample supply of cars and locomotives?

Mr. ROBINSON. I think so. I am not quite certain. I think we have two or three on order or delivered. There has been some question whether we would need them, and of course if they are not needed they are readily saleable to people who do need them.

The CHAIRMAN. How about the problems of housing and transportation down there?

Mr. ROBINSON. The transportation down there is very much better than it was, but it is never going to be as good as is necessary until they get a street-car connection down in there, which they are planning to do now in connection with the housing problem.

The CHAIRMAN. Where are you to put these houses? And how far are they to be located from the plant?

Mr. ROBINSON. I think two or three miles—something like that.

The CHAIRMAN. How are the people getting to and from the yard?

Mr. ROBINSON. By trolley.

The CHAIRMAN. Double track or single track?

Mr. ROBINSON. Double track trolley. This is the situation [referring to map on committee table]. There is the property [indicating on map] and this is what we call the shuttle line, and the

passenger trains now come in over the Reading. They start here [indicating] on the Pennsylvania and some of them come down over the Reading and go down here and come in there. They are projecting in connection with the housing this island come down in here [indicating on map], and the housing, according to my recollection, is proposed up in here [indicating]. The money comes now this way here and goes down to Chester [indicating].

Senator VARDAMAN. Mr. Robinson, is any of that land sufficiently high above tidewater to be suited to building the houses on without piers?

Mr. ROBINSON. Up here [indicating], yes. This is what they call "plus" ground. They have plus and minus ground in Philadelphia. Some of it is minus, because it has been pumped behind the dikes.

Senator VARDAMAN. How much has been expended since you bought this site in filling in, bringing in earth there to fill it so as to make it habitable?

The CHAIRMAN. You mean down here [indicating on map]?

Senator VARDAMAN. Anywhere.

Mr. ROBINSON. I do not know just how much has been spent on that.

The CHAIRMAN. Hog Island is shown on this map by the green?

Mr. ROBINSON. Yes; that is Hog Island down there [indicating].

Senator VARDAMAN. You have been compelled to haul in a good deal of clay and gravel?

Mr. ROBINSON. We have hauled in for grading in here for these tracks to get drainage, etc.

Senator VARDAMAN. Do you know how much has been spent for that?

Mr. ROBINSON. No; I can not say offhand.

Senator VARDAMAN. How much of that land was under water?

Mr. ROBINSON. Practically none of that land was under water, Senator, because there have been dikes put in.

Senator VARDAMAN. What percentage of that is under water?

Mr. ROBINSON. I can not say. I would have to get that information for you, Senator. It is all a matter of contours there [indicating on map].

The CHAIRMAN. What is this green over here [indicating on map]?

Mr. ROBINSON. That is where we are going to dump some of the material, pump it into there.

The CHAIRMAN. Is that part of the Government's holdings or your holdings?

Mr. ROBINSON. That is just a dump.

The CHAIRMAN. That is not included in the 979 acres?

Mr. ROBINSON. No.

The CHAIRMAN. Who owns that land that you are dumping on there?

Mr. ROBINSON. Why, it is a question whether our firm may have some interest in it here [indicating], and I do not know. At one time the Westinghouse owned half of that and private owners owned the other half, and whether they have acquired it or not I do not know.

The CHAIRMAN. You are just using it with their consent?

Mr. ROBINSON. We are just using it with their consent.

The CHAIRMAN. Not that you claim to own it?

Mr. ROBINSON. No. It has been one of the problems there to dump dredging material on without rehandling, and we just pump it in there with a minimum amount of cost.

The CHAIRMAN. Do you know what expense is going to be necessary to provide housing?

Mr. ROBINSON. In general; no. I do not, Senator. We made an estimate there at one time; we thought from such surveys as we had made that it would be in the neighborhood of $10,000,000, but I think they have cut back on that sum. The Fleet Corporation have had that matter up in their own department, and we have just turned over to them such information as we had in connection with it.

The CHAIRMAN. One of the advantages pointed out in locating the plant there was because it was near an available labor supply?

Mr. ROBINSON. Yes.

The CHAIRMAN. The fact that you have got to spend these millions of dollars to house the labor is rather a disadvantage than an advantage, is it not?

Mr. ROBINSON. I think that is true of most any available site these days, so far as I can observe. All of these shipbuilding people—the New York Shipbuilding at Camden, and Newport News, Sparrows Point, and all of them—are inadequate in their facilities for housing. We made a canvass of the city of Philadelphia and did not find there anything like the ability to absorb labor that I think one would ordinarily have expected to find in a city of that size.

The CHAIRMAN. Would it be your judgment in regard to accomplishing the rapid building of ships that it was wise to establish such a large plant as that in one place, rather than to divide it up into yards of 15 or 20 ways in different places?

Mr. ROBINSON. Yes; I feel so, because I think that the minute you begin to split that up and scatter it around that way you are going to increase the difficulties of handling your problem of getting your top organization and your men to make a going program, as I see it. That is a repeat-manufacturing operation there of building those vessels, and it means four or five to detail instead of one, as we have had to detail to date, and all that sort of thing. I believe that we can handle it better.

The CHAIRMAN. Suppose you give, just in a condensed way, the advantages and the disadvantages of the yard at that location.

Mr. ROBINSON. I can only go over the same ground that has been gone over before, that it has the advantages of deep water, of reasonably good freight transportation, and no very excessive difficulties in passenger transportation. We have been handling down there with the facilities we have now 20,000 to 22,000 men with a reasonable degree of success. But the housing problem comes in there. When you try to get mechanics in there from other sections who have their homes, it is not a housing problem, it is a homing problem, as I look at it. We can have the individual workers and have facilities down there for handling a great many—5,000 or more—and can increase that, but it is the married man and the man of family that, if you are going to get your labor in sufficient quantities to build these ships, you have to get that kind of individual into the community, and he

has to have some place to live when he comes there. If the place does not exist, it has to be furnished for him.

The CHAIRMAN. Is there any advantage in being in proximity to the raw materials needed for the building of ships?

Mr. ROBINSON. Yes: I think it is a decided advantage, although under these conditions you have got to take advantage of material wherever you can find it, and that is the thing we have done.

The CHAIRMAN. It has been testified before the committee that the coast was examined as far as Baltimore, and may be a little farther; but is there any reason why some plants could not be established farther down the coast?

Mr. ROBINSON. I would not say that that could not be; but I think that everybody felt that the location there near Philadelphia, where you have got a nucleus of trained men and skilled men of all sorts and kinds—Philadelphia is commonly looked upon as almost the best labor market in which to secure mechanics in the country. But, of course, there has been a big demand for them, and we are adding to the demand, and you have got to build these ships on the coast, somewhere, and you have got to get mechanics from the interior to build it.

The CHAIRMAN. Would not the advantage of a milder climate be worth considering?

Mr. ROBINSON. Yes.

The CHAIRMAN. Your experience this winter would demonstrate that, would it not?

Mr. ROBINSON. Our experience this winter was very unusual; I should say that. The records of the weather bureau at Philadelphia do not show anything like the conditions we have had to contend with before. There is a large amount of shipbuilding going on in that section irrespective of climate.

The CHAIRMAN. Do you know of instances like this: Some one said to me that he was informed that you used good lumber in order to thaw out the ground so that you could drive piles; that you took lumber from the lumber piles and placed it where you had to thaw out the ground and set the lumber on fire?

Mr. ROBINSON. We may have used pile caps which had been sawed off of piles, but I do not believe any good lumber was used for that purpose.

The CHAIRMAN. Do you know what the electric light cost there?

Mr. ROBINSON. No; I do not. We made a contract with the Philadelphia Electric Co. for supplying us light and power.

The CHAIRMAN. Do you know what you are paying for the water?

Mr. ROBINSON. The water we expect to get mostly from wells. We have a temporary connection with the city of Philadelphia to get water down there until we get our own system installed, but we expect to have our own water producing from wells or from the river, which will be filtered under the direction of the health department, before long.

The CHAIRMAN. How deep do you have to go with the wells?

Mr. ROBINSON. I can not say out of hand. We have several wells. Most of the water we use comes from wells and it is perfectly good water. We have had it examined every day, practically.

Senator NELSON. How did you make the holes for the pile drivers when the ground was frozen?

Mr. ROBINSON. We had to blast some of them.

Senator NELSON. I wanted to say to you that for the future-give you a little more "know how"—that if you had brought som those Alaska miners down there they would have steamed the l out.

Mr. ROBINSON. We did steam them and then blasted them. steamed a lot of holes out. We also had to steam the cars out to coal and materials unloaded from them.

Senator NELSON. They steam the holes out in Alaska.

Mr. ROBINSON. We used that method quite a lot.

There was a resolution read here yesterday that I wanted to something on. It was about reducing the salaries and displac men, and I think that is a matter of pretty far-reaching importa and it seems to me that there is nothing that is going to do any m harm or interfere more rapidly with the shipbuilding program t to kill the spirit and the initiative of a bunch of men who are work there as hard as that crowd of men have been working.

Senator NELSON. Out West we think it interferes with the sal liberty bonds. We are hit that way.

Mr. ROBINSON. I do not know of any surer way of delaying ships than by making it unattractive for those people to work th I do not know of anything more far-reaching in its injury than be inflicted by that sort of thing. I think that anything that t the heart out of that bunch of men and which makes them uncer is a thing that is going to materially affect and slow down the w There is not any other way to it, and anything that interferes v that speed there I think is just as hurtful as any act an enemy can The effect of unfounded criticism and charges which are made by the Shipping Board, the management of the job, but by out people, however well intentioned, is far more ruinous than tho somebody would have come along and blown up part of the p with dynamite, because that we can replace. You can replace dam caused by dynamite with a little effort and a little expenditure. other kind of damage is so insidious and far-reaching that i mighty hard to correct. We have had difficulty there in holding men. The men have been working hard and under a good dea criticism of one kind and another, and it would surprise you how down the line that thing goes. At the present time we are well wit our schedule there. We feel that the work will be done on time the ships be produced if we can get the labor, steel, and other m rial, and that everybody in the Government has got to help us ge

Senator JOHNSON. I understand that you are indulging in a c cism here of the committee and of the committee's action. I was present when the particular resolution was passed, but I am quit accord with it and interested in the criticism and the lecture wl you have just delivered to other members of the committee, altho they may not be interested in it.

Mr. ROBINSON. I did not mean it in that sense.

Senator JOHNSON. I am not objecting to it, because, as I sta I was not here when the resolution was passed, although I am in accord with it, nevertheless.

Senator VARDAMAN. I would like to ask just in that connection same question I did yesterday. Admiral Bowles told the commit

if I remember correctly, that he had reduced already the salaries to an amount of between $250,000 and $275,000 a year; that he had taken out those men who received $20,000 and over a year for publicity work, and put it all in the hands of one hand with a salary of $4,000 or $6,000 a year. Do you think that has destroyed the spirit and morale of the men? Do you think Admiral Bowles made any mistake about that?

Mr. ROBINSON. I would not criticize Admiral Bowles's action in that particular.

Senator JOHNSON. Is it your viewpoint that only by giving Mr. Goodenough $25,000 a year and those other high salaries that you can maintain efficiency in your yard and keep up the speed?

Mr. ROBINSON. I think that it would be pretty hard to answer a question like that yes or no. I think it is a matter of judgment, Senator, about how you can best do that sort of thing.

Senator JOHNSON. As I understand, in criticizing the committee or its action, your statement was that to indulge in any of those reductions would lessen the speed of the men and interfere with the morale and the esprit du corps there and retard the efficiency of the work; is that correct?

Mr. ROBINSON. I think that it is very apt to work that way; yes, Senator; I really think so.

Senator JOHNSON. So that it is absolutely essential, in order that we may have this speed in this particular crisis, that Mr. Goodenough should be paid $25,000 and these other salaries of a like amount right here be paid?

Mr. ROBINSON. I would like to say that that was the inference you would necessarily draw. What I mean is, here is a crowd of men working at top speed, and using every bit of energy they can put into the work.

Senator JOHNSON. Top speed and top salaries?

Mr. ROBINSON. If you want to say it, that is one way to get the best effort and best results.

Senator JOHNSON. And these salaries you deem essential in order to get the effort and results?

Mr. ROBINSON. I do, indeed. I would not be in favor of doing otherwise.

Senator JOHNSON. And if reduced at all, then we would be without effort and the results?

Mr. ROBINSON. I would not say that, except I do think it is going to have very serious effect on the initiative.

Senator JOHNSON. Just for myself personally, and without saying anything harsh or invidious at all, the threat of that sort will not affect me in the slightest degree, no matter if it comes from the International Co. or Stone & Webster, or from anybody else.

Mr. ROBINSON. Senator, please do not take it that way. It is the farthest from my mind to make anything like a threat or criticism. I merely wanted to point out not the criticism of this committee so much, but what the criticism has been doing to the job. The things which have been said about it. It has taken a great deal of heart out of the men and can not help but do that.

Senator JOHNSON. Out of what men?

Mr. ROBINSON. The men working down there.

Senator NELSON. And so with respect to dredges, if they should arrive at the plant crippled and dismantled and out of repair, they should be put in condition by the Government?

Mr. ROBINSON. I do not think that has been done.

Senator NELSON. At Government expense?

Mr. ROBINSON. I would not say that.

Senator NELSON. And some of the pile drivers were constructed of Government material and then labeled as the property of the contractors. Do you know anything about that?

Mr. ROBINSON. I do not believe there has been anything of that kind done.

The CHAIRMAN. Who would know about that?

Mr. ROBINSON. I can find out from the records there at the island.

The CHAIRMAN. Who would have charge of them, Mr. Muhlfeld?

Mr. ROBINSON. I would take it up with Mr. Muhlfeld, and have him ascertain; yes. I think what the men have done down there has been worthy of a great deal of commendation myself. Of course, what we have been aiming at there is to speed ships, and I do not see how you are going to get them any other way. It has been a greater strain on the organization and the individual in the performance of that work than any I have been connected with.

Senator NELSON. Do you think you had any real speed there until you get Admiral Bowles, and then you hastened down here and told us you had ready one way, after he had been there two or three weeks?

Mr. ROBINSON. I read an interview with Admiral Bowles in which that question was asked him, and he said the job had been speeded up, but it was due more to the weather than to him. That is the way he felt about it. I think the job has required great personal sacrifices there, and that it is my duty to say that I am proud of the work we have done there, not only on my own account, but I think the men have sacrificed themselves in every way. They do not know what hours mean. They have shown patriotism, fidelity, and ability, and I think they deserve the highest praise this country can give them. They are there doing patriotic duty in trying to serve the country in the very best way they know how. I do not know of any more and efficient work than has been done by the men down there from the ground up—the laboring man and everybody else. And if we are going to get ships somebody has got to be encouraged to build them.

Senator VARDAMAN. Do you think that encouragement can only be obtained by paying exorbitant salaries?

Mr. ROBINSON. Senator, I do not think that at all. I think the men have been working down there with their hearts in the job, and they have not been getting any more salaries than they could have gotten on other jobs or that they can go out to-day and get on hundreds of jobs.

The CHAIRMAN. Do the men down there get any meals on the job?

Mr. ROBINSON. They do, and they pay for them all.

The CHAIRMAN. What meals?

Mr. ROBINSON. They get a choice of a 30-cent meal.

The CHAIRMAN. I mean breakfast, dinner, or supper?

Mr. ROBINSON. We serve four meals a day. We serve a midnight meal also.

The CHAIRMAN. At what prices?

Mr. ROBINSON. A 30-cent meal, and then I think a 75-cent meal, and I think there is one between somewhere.

The CHAIRMAN. Then you have a certain number of men in the barracks. About how many of them?

Mr. ROBINSON. About 5,000 men.

The CHAIRMAN. Do they get their meals at these commissary places or have they their own commissaries?

Mr. ROBINSON. Some of the camps run their own commissaries; some of the foreign labor. Up in here [indicating on map] we have some Italian camps who run their own commissary, but down in here [indicating] we run the mess for them.

The CHAIRMAN. Thirty cents you say, and what else?

Mr. ROBINSON. There is a place where people can get a meal at 75 cents, and I think there is a 40-cent meal, although I am not certain about that. I have Mr. Kennedy here, who can tell you all about that, and what we are doing in the way of handling labor, looking out for the welfare of the men, and all that sort of thing.

The CHAIRMAN. Is the 30-cent meal a mere lunch or is it a substantial meal.

Mr. ROBINSON. No; it is a substantial meal. The gentlemen who came up there sampled it.

Senator VARDAMAN. It is a good meal.

Senator RANSDELL. Mr. Robinson, I want to ask you if you know how the salaries for similar work at yards like Newport News, Sparrows Point, and Fore River, near Boston, compare with the salaries being paid at Hog Island, if you know?

Mr. ROBINSON. I do not know of personal knowledge, but from hearsay I am satisfied that I am correctly informed that the salaries of the higher men in those works are very much greater than any salaries we pay.

Senator RANSDELL. You think the salaries then for similar works are actually higher at these other plants?

Mr. ROBINSON. I do. I do not think there is any doubt but that men there can go out and get equally as much money as they are getting from us.

I tried to say yesterday, and I do not think I did say it, that in some of the work in Texas, where we got through down there, there was some work given to another outfit, and their salary rolls were quite a bit higher than ours, for their superintendent, timekeepers, and their accountant.

Senator RANSDELL. That was on the cantonment work?

Mr. ROBINSON. Some of the work that came along subsequent to the cantonment work, and I know our salaries compared more than favorably with the salaries of other contractors doing similar work.

Senator RANSDELL. Then, in your judgment, these salaries at Hog Island are not exorbitant compared with works around at other places?

Mr. ROBINSON. I do not think so. Neither do I think at these other places where they are getting a great deal more. I think that the question of salary is of the nature that you go out and pay for services as you go out and pay for any other commodity. You have to pay what the market is, and get what you can in the market. I

know that has been our experience and that has been a large part of our business, the hiring of men, and knowing about men, and knowing what they are worth, and I know that almost invariably when we have to go outside of our organization to get men of similar capacity to those we have in it, invariably we have to pay more money, not because I do not think by and large we pay enough, but a great many of the men like to work for us, even though they can go outside and get more money. They like the organization; they like the way they are handled; they like the way they are taken care of, and thought about, and they know that when times are dull that they are going to be reasonably taken care of as well as when times are flush.

The CHAIRMAN. Are those $10,000 or those $12,000 men under any annual contract or other contract that would interfere with your discharging them if they do not give service?

Mr. ROBINSON. No; if there is any obligation of that kind it attaches to us and not to the Government. We might have had to make some commitments to get men off of a job, but we consider that as our commitment, and if any man is changed that is a matter for us to take care of and not for the Government.

Senator RANSDELL. Could your company derive any particular benefit from paying these salaries that are called high to these men?

Mr. ROBINSON. You mean any pecuniary benefit?

Senator RANSDELL. I asked if it would be possible for your company to derive any pecuniary benefit from these high salaries, assuming they are high.

Mr. ROBINSON. None whatever. The salaries of the men have gone up from year to year, depending upon their capability.

Senator JOHNSON. Are not Stone & Webster benefited by being enabled to maintain their organization?

Mr. ROBINSON. Yes; it puts them in a position to take on work, Senator.

Senator JOHNSON. Is not that a very vast asset in a going concern?

Mr. ROBINSON. I think it is indeed.

Senator JOHNSON. And if you are able to maintain your entire organization in one contract such as this, do you not receive still greater benefit?

Mr. ROBINSON. I think that is hardly correct. It is really a great disadvantage to have the entire force on a single contract, because while we are doing this kind of work we are having to turn down other work that is scattered over a greater area and among a greater number of people which would give us future possibilities that this job will not. I think it is quite the contrary. I would a great deal rather have my force scattered over a number of different jobs than to have it concentrated on one job.

Senator JOHNSON. Did you not admit yesterday that you had a number of jobs now on hand?

Mr. ROBINSON. Yes; we still have some other work on hand, but we have scarcely taken on any other work since we undertook this. There are one or two small bits of work we have taken on for former clients, one a small power-station job that we were able to handle, but work requiring any considerable force in the field we have not attempted to get. We could not do it.

Senator JOHNSON. Were you not fearful that during the war you would be unable to continue in your activities?

Mr. ROBINSON. I do not think I know what you mean by that.

Senator JOHNSON. Did you expect the same amount of large activities to continue during the war in relation to public utilities and the like as before?

Mr. ROBINSON. No.

Senator JOHNSON. Is it not a fact that you looked forward to a time during the war when your organization would of necessity disintegrate because of the lack of large projects being carried out?

Mr. ROBINSON. Why, there is a tremendous amount of work going on in this country, Senator. It has been our experience ever since the war started on the other side that there has been no difficulty in getting work. It is a hard thing to discount in advance.

Senator JOHNSON. Would you say it is a detriment or that it is an advantage to you to be able to maintain the Stone & Webster organization as it is maintained to-day?

Mr. ROBINSON. I think it is a distinct detriment to us to have as large a percentage of our force concentrated on a job as there is to-day on this.

Senator JOHNSON. Did you believe that at the time you entered into the contract and began this work?

Mr. ROBINSON. Absolutely.

Senator JOHNSON. And notwithstanding that you were willing to go ahead and make the necessary sacrifice?

Mr. ROBINSON. Absolutely so.

Senator JOHNSON. And it was done wholly as a patriotic duty, the undertaking of this work by Stone & Webster and yourself?

Mr. ROBINSON. I think we all went into it with the desire to be of service to the country. I know I did; decidedly so. I was glad of the opportunity, and I am proud of what we have done here, proud of what the men have done here, what they are trying to do and hope to do.

Senator JOHNSON. And that was your motive in going into the contract, was it?

Mr. ROBINSON. So far as I am concerned, it was, Senator.

Senator JOHNSON. So far as your associates were concerned, was it likewise true of them?

Mr. ROBINSON. I think in very large measure it was.

Senator JOHNSON. You think in large measure it was?

Mr. ROBINSON. I do, indeed.

Senator JOHNSON. Notwithstanding they asked for 10 per cent commission and then went down gradually until they got down to

Mr. ROBINSON. That is merely how things go.

Senator JONES. Mr. Robinson, aside from what you have suggested that might cause delay in the work there, is there anything else in connection with the work that in your judgment might cause delay in the completion of the ships?

Mr. ROBINSON. Of course, the control of material, machinery, things of that sort is very largely out of private hands. We are doing everything we can, of course, to work up a force and organize in conjunction with the Shipping Board. I believe that is the thing to worry about. I believe, however, that that is going to

along so I would not expect any great amount of delay, but it is something everybody has got to work on, and every influence that can be brought to bear has got to be brought to bear to protect this shipbuilding program, not only here but in the other yards as well.

Senator JONES. What I have in mind is this, and I want a frank statement from you, because I can not think of hardly anything that would justify any act that would result in a serious delay in the completion of ships at present. I want to ask you whether there is anything taking place at the yard, through the Emergency Fleet Corporation or otherwise, or through its agents, that in your judgment would tend to delay the completion of the program there?

Mr. ROBINSON. Oh, that is a pretty hard thing to say, Senator.

Senator JONES. I know it is; but you are in charge there in connection with this work, and I want your judgment for what it may be worth. You are no more anxious to get those ships finished as early as possible than we are.

Mr. ROBINSON. I appreciate that, Senator. It may sound egotistical, and it is not intended in any spirit of criticism, but it has been our experience that the freer hand we can be given in any construction work the better results we get. Our clients always reserve the right to direct the work to any extent they choose, but they rarely choose to direct it to any great extent, because they hired us with the idea that we could do the work. I think we are capable of doing this work with the minimum amount of direction, but we are perfectly willing to be directed to any extent if that seems to be the thing to do.

Senator NELSON. Are you being delayed now by the lack of material?

Mr. ROBINSON. I think not, Senator. I do not think the steel is coming along as fast as we would like to have it, but we are pushing on it; everybody is pushing on it.

Senator NELSON. How about the other material—lumber, for instance?

Mr. ROBINSON. We are a little short of lumber; we would be able to use more. Our warehouses we have been rushing along, and we have been short of lumber, but with the good weather and things straightening out as they are conditions will probably improve.

Senator NELSON. Have you enough piling?

Mr. ROBINSON. Yes; we have at the present time. The piling is coming in in good shape for the program as it is.

Senator NELSON. Have you enough material for those railroads you were building in the yard there?

Mr. ROBINSON. These [indicating on blue print] are all built here. We have about 50 miles built, Senator, out of some 65 or 70.

Senator NELSON. Then you do not want any more material for railroad building?

Mr. ROBINSON. I think we have practically enough on hand. We have not had any difficulty in getting that. There has been a lot of this Russian rail kicking around that we have been able to get hold of pretty easily.

Senator NELSON. So that practically all you need now to speed up your work is fabricated material?

Mr. ROBINSON. That and steel for the shops. The foundations are all ready, and a lot of that work is coming along. Of course those things are being given attention by us and by the Shipping Board.

Senator NELSON. So far as you know, you are not threatened with any delay?

Mr. ROBINSON. No; I think we are well within our program now, Senator.

Senator VARDAMAN. Mr. Robinson, when do you expect to have the first ship afloat?

Mr. ROBINSON. Why, I do not know whether I have any figures here on that or not.

Senator NELSON. I think Mr. Connick said November or December—

Mr. ROBINSON. Some time in July, or around the 1st of August.

Senator NELSON. I understood they would not be afloat and ready for sea until in November or December.

Mr. ROBINSON. This is afloat, but then there is the fitting out, the installing of the machinery, and so on.

Senator VARDAMAN. I mean when will they be ready to go across the ocean?

Mr. ROBINSON. According to this, I would say about the 5th of September.

Senator VARDAMAN. This first ship?

Mr. ROBINSON. Yes, sir.

Senator NELSON. You mean they will be ready for sea then?

Mr. ROBINSON. Yes, sir.

Senator VARDAMAN. How many do you expect to have by that time?

Mr. ROBINSON. They will run along so there will be 25 of them that will average around the 1st of November; the latter part of October or the 1st of November.

Senator NELSON. How many do you expect to get out in this calendar year? I mean out on the sea ready for use?

Mr. ROBINSON. About 50.

Senator NELSON. That means the smaller vessels, I suppose?

Mr. ROBINSON. No; 25 of the smaller and 25 of the others.

Senator JONES. If you should fail in that, is there anything being done now that you could lay the blame to hereafter to account for the delay—any restriction being imposed upon your discretion? That may be rather an embarrassing question, but this is a matter we ought to talk plainly about, I think. We ought to know whether the Government is doing anything that, in your judgment, would cause delay as well as to find out what is wrong with you.

Mr. ROBINSON. That is a hard question to answer, Senator, because it is merely a matter of judgment, a matter of opinion, and I dislike to get into what may seem to be a controversial attitude.

Senator JONES. I take it from that that you are of the opinion that things are being done that may cause delay, and if you did not get your ships out according to the program you could claim that was the reason for it.

Mr. ROBINSON. Doubtless there would be equally sound claims that it was not so.

Senator JONES. Yes. I will not press it then for the present.

Mr. ROBINSON. We are under orders. I look at this this way, that we are a war proposition, a part of the war machinery——

Senator VARDAMAN. You have had up to this time a pretty free hand, have you not?

Mr. ROBINSON. In a great many respects, yes. On the other hand we have had to get approvals of everything, and it has not always been the easiest thing in the world. I do not think there has been any intention of delay anywhere, nothing but the intention to protect the Government in every particular. This is a large undertaking. It is not the only undertaking the Fleet Corporation has on hand, and it has taken them time to get organized. That is evidence of how long it takes to get a good working organization together. It can not be done in a minute.

Senator NELSON. Will it not help you to have Admiral Bowles there as the representative of the board, so you can communicate with him on the ground?

Mr. ROBINSON. It cuts out a good deal of delay in getting decisions, yes. We are under orders to do anything that we are called on to do. Of course, when it comes down to a matter of construction, the order of construction, the rate of construction, and that sort of thing, we think we are qualified to handle it, and that was what was expected of us when we went into the thing, but if the powers that be see fit not to acquiesce in it there is nothing else for us to do. We consider we are just as much a part of the Government as you people are.

Senator JONES. I appreciate that. What I was getting at is this: If we order you to do something that you as business men and expert engineers do not think will bring about the best results, I would like to have your frank statement about it.

Mr. ROBINSON. I think we have tried to say so, in general, when we have been given instructions that we did not wholly approve of, or tried to make clear our point of view, and if we could not make the people see it our way we cheerfully went ahead and did it the way they wanted it done. We have been doing nothing but specialize on large construction work, rush work, quick work, all these years.

This is not an operating proposition to-day. It can not be made an operating proposition to-day. It is not like a manufacturing proposition. I would rather have too many men down there than too few. I would rather have cars waiting to be unloaded than to have men waiting to unload the cars or places waiting for material to go into. That is the kind of thing we have been doing, getting material here, there, and elsewhere, and the minute you take the initiative away from an organization of that sort you kill a large percentage of your ability and efficiency. It may be the proper thing to do. It may be proper even to go beyond that. It may be the proper thing for the Government even to take this job away from us. It is not for me to say. I am here to obey orders and say what I think is for the benefit of the country, what will best supply the need and what will most quickly supply the need; and I am not going to say anything but my own honest opinion in reference to that.

I would not have gone into this thing if I had not felt that there was a tremendous need for ships. I do not consider that there is any mystery about shipbuilding, but if there is we have got the proper people to guide us. I have gone into this as a construction proposition pure and simple, to slam away, jam away, bang away,

to get it done. I told Admiral Rousseau before we ever started up, "This thing is going to look like an organized riot. It can not look like anything else. If anybody thinks they can go down there and have everything going in order and just in the right way, they are going to be disappointed, because you are not going to get your boats built along those lines. When you come to your boat building there will be more order, but until you get your construction work out of the way you are going to have it looking as if there is a good deal of confusion there."

Now, I do not like to say this in a sense of criticism, gentlemen, and I do not say it in that sense at all, but the question of salaries I can not help but feel is a very minor question compared with whether you are going to get the boats or not. If by getting men of energy, and if by paying the salaries you get men of energy and high purpose, men who will put their time in without stint to drive this thing on to completion, to serve their country and get these boats done, I think the question of salaries is entirely a minor consideration.

Senator JONES. I think we understand your position on that, Mr. Robinson. What I was asking was with reference to whether there was anything else in connection with the policy being pursued up there that would likely cause delay. I think I now understand your attitude with reference to that, too.

The CHAIRMAN. Do you feel that you have the situation well in hand now, Mr. Robinson?

Mr. ROBINSON. I do, Senator. I feel we have had it well in hand all the time. It has been a tremendous piece of work. There has been a tremendous lot of petty criticism leveled at it from all quarters. It has interfered with the orderly going on of a whole lot of things in Philadelphia. Some people have lost their stenographers, some have lost labor, some have lost their clerks, some have lost their carpenters. But when we went in there we paid the going rate of wages in that community. We worked longer hours and the men made overtime, and they were able to earn more; but they did not get any more per hour than they were getting before. We did not, as has been charged, break the labor market. I mean, we observed the hours, rates, and overtime rates that were in existence there. So far as skilled mechanics are concerned, we had to follow the Government's schedules which have been given us.

Senator NELSON. Where they worked overtime you paid time and a half?

Mr. ROBINSON. Time and a half; yes, sir; and we have done it to get speed.

Senator NELSON. And on holidays and Sundays you paid even more than that?

Mr. ROBINSON. Double time, for a great deal of it.

Senator VARDAMAN. The Government fixes those wages; does it not?

Mr. ROBINSON. It fixes all the rates for the crafts; yes. I do not think they fix the rates on what we call the building trades, and that is practically what we have been using.

The CHAIRMAN. At first, I understand, Mr. Robinson, you employed a lot of people that were not very efficient?

Mr. ROBINSON. We have cleaned those out just as rapidly as we could, Senator.

The CHAIRMAN. So you are in better shape in that regard?

Mr. ROBINSON. Oh, infinitely so. But I want to add to what Mr. Connick said the other day my own appreciation of what labor has done there. Transportation facilities were very poor and men would get down there an hour or two late in the morning. We could compensate them for that, but when they did not get home until late at night we could not compensate them for that. A man would lose sleep; he had little time with his family; and it often meant that he would not get to work again until much later the next day, if at all. That was something we could not pay them for. I think all those things have got to be taken into consideration in considering what we have been doing, what we have accomplished, what the problems are and have been down there.

We have had, as I say, a lot of petty criticism of all kinds. We have not been perfect. Nobody is perfect; far from it. But we certainly have used intelligence and tried honestly, energetically, and, I think, patriotically.

The CHAIRMAN. If there are no other questions, I believe that is all, Mr. Robinson.

Mr. ROBINSON. I want to thank you for the time you have given me here, gentlemen.

Senator NELSON. I am afraid you do not feel like thanking some of us. [Laughter.]

Mr. ROBINSON. I think that is all in a day's work, Senator. One man is entitled to his opinion as well as another. I have tried my best to have you see things as I see them. If I can not convince you that is my fault, not yours, I assure you.

Senator JONES. In view of the action of the committee with reference to the salaries at Hog Island, without criticizing the action of the committee, but simply for the record, I want to say that while I have been here most of the time, I did not happen to be here when that resolution was passed and did not know it was passed until it was produced here yesterday. The point I wish to make is that I think we ought to have similar information with reference to the salaries paid by the Submarine Boat Corporation and the Merchant Shipbuilding Corporation.

Senator VARDAMAN. Personally I preferred that the matter wait until we heard more evidence. I did not vote on the resolution at all, but I think the committee was clearly within its rights in adopting it.

Senator JONES. I am not questioning it at all; I simply want it clear that I did not happen to be here when that was done. But I think we ought to have similar information with regard to these other agency contracts.

The CHAIRMAN. Do you wish to make a motion to that effect?

Senator JONES. I move that we call on the other two agency contract corporations for information with reference to employees receiving $200 a month and upward, similar to the information that we have with reference to Hog Island.

(The motion was duly seconded and agreed to.)

(Thereupon, at 4.45 o'clock p. m., the committee proceeded to the consideration of executive business, and at 5 o'clock p. m. adjourned to meet at the call of the chairman.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

SATURDAY, MARCH 9, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to call, at 2 o'clock p. m., in the committee room, Capitol, Senator Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Sheppard, Vardaman, Jones, Sherman, and Harding.

Present also: Hon. Charles L. McNary, a Senator in Congress from the State of Oregon.

Senator VARDAMAN. Senator McNary, this committee was called together at your request, and I suggest that you make a statement as to what you desire to bring out, and introduce the witnesses in the order in which you wish them to speak.

Senator MCNARY. I am not at all averse to making a statement, but I think the testimony itself will develop that which I expect to be able to show respecting the construction of wooden ships in Oregon and Washington. Fortunately, in the last two or three days a number of lumbermen from the Northwest have come to Washington, and I desired to take advantage of that opportunity of getting into the record the fact that, with very little increase in effort, the wooden-ship construction on the Pacific coast might be increased, and that more ships might be had out of the available lumber—which facts have not been quite appreciated, I think, by the Shipping Board, nor thoroughly understood by this committee. And that was the purpose that I had in asking the chairman of the committee to call this meeting, so that the testimony of these gentlemen might be taken.

Senator VARDAMAN. Which witness do you desire to hear first?

Senator MCNARY. I will ask Mr. Van Duzer to take the stand first. Gentlemen, this is Mr. H. B. Van Duzer.

You are an associate of the Inman-Paulson Co., of Portland, Oreg., are you?

STATEMENT OF MR. H. B. VAN DUZER, OF PORTLAND, OREG.

Mr. VAN DUZER. Yes, sir.

Senator MCNARY. You are engaged in what line of work?

Mr. VAN DUZER. In the lumber business.

Senator MCNARY. What experience have you had?

Mr. VAN DUZER. I have been in the lumber business for something like 18 years.

Senator McNary. Does your company construct ships, or does it manufacture lumber from logs?

Mr. Van Duzer. It manufactures lumber.

Senator McNary. Are you connected with any ship construction company?

Mr. Van Duzer. No, sir.

Senator McNary. Either directly or indirectly?

Mr. Van Duzer. No, sir.

Senator McNary. Are you familiar with the conditions that obtain in Oregon and Washington, with respect to the available lumber supply?

Mr. Van Duzer. I am naturally more acquainted with the available supply of Oregon timber than I am with the Washington timber. Mr. Bloedel is in touch with the Washington timber.

Senator McNary. Have the logging camps and the mills in that region—I am speaking now of Oregon—reached their maximum output?

Mr. Van Duzer. Do you mean in regard to ship material?

Senator McNary. Yes.

Mr. Van Duzer. No, sir.

Senator McNary. You may now go ahead in your own way and discuss that phase of the situation presented by this inquiry.

Mr. Van Duzer. When I said that the mills have not reached their maximum, I had in view the fact that many of the interior mills—that is, off of tide water, from which shipments can be made by rail to tide water, to shipyards—are only to a limited degree sawing upon ship specifications. And also in that connection I would state that the question of manufacture of ship lumber is not a question of saw milling, but almost entirely a question, in the Northwest, of the law of supply—the securing of the available timber at the mills. The mill capacity is great enough and the manufacturing plants could be put upon a double-shift basis if necessary. I do not know if you want me to say anything more, Senator.

Senator Harding. Let me ask you this question: Are you familiar with the shipbuilding industry of the west coast at all?

Mr. Van Duzer. In what way, Senator?

Senator Harding. Well, can you answer this question: Are there any wooden ships being built on the west coast for the French Government?

Mr. Van Duzer. Yes, sir; there are some 40 ships being built by the Foundation Co.—20 of them at Portland, Oreg., and 20 at Tacoma, Wash.—for the French Government.

Senator Harding. Are they using specifications which are decidedly different, as to timber, from those for the so-called standard wooden ship adopted by the Shipping Board?

Mr. Van Duzer. In some particulars, but not so drastically different.

Senator Harding. Are they using a much smaller stick of timber than is required in the so-called Ferris type of ship?

Mr. Van Duzer. No, sir.

Senator Harding. I asked you the question because I have been advised very recently, to my surprise, that they were building those French ships. I believe we had not had any testimony to that effect

before the committee. Do you recall any such testimony, Senator Jones?

Senator JONES. Yes; it has been brought out that some of those ships were being built by the Foundation Co. at Tacoma, Wash.

Senator HARDING. I did not know that.

Senator JONES. But I may suggest that they are a very much smaller ship than the standard Shipping Board type, are they not, Mr. Van Duzer?

Mr. VAN DUZER. They are a much smaller ship; yes.

Senator HARDING. What is the tonnage, if you know?

Senator JONES. About 2,000 or 2,500 tons.

Mr. VAN DUZER. I can not answer that. Mr. Ransome, can you state the tonnage of those ships?

Mr. RANSOME. As compared to the 3,500-ton deadweight Ferris type ships, they are about 3,000 ton.

Senator HARDING. What I wanted to get at was that I have been told that they were made out of sizes of timber that were very much easier to get than the timber for the Ferris type.

Mr. VAN DUZER. No, sir.

Senator HARDING. There is nothing in that?

Mr. VAN DUZER. There is nothing in that.

Senator JONES. I would like to suggest that I have understood from the Shipping Board that the ships being built by the Foundation Company are less than 2,500 tons deadweight; and that that was the reason they were allowed to go out of the control of our Government, because, under the law, no ships of over 2,500 tons could go outside of Government control.

Senator MCNARY. I believe there were 26 of 2,000 tons and 14 of 2,500 tons.

Senator JONES. Yes; that would probably be correct; they are not over 2,500 tons.

Mr. VAN DUZER. These ships, I understand, are being built directly for the French Government.

Senator HARDING. They are probably not intended for transatlantic service.

Senator MCNARY. No. Mr. Van Duzer, to what extent could the output of available ship timber be increased?

Mr. VAN DUZER. That is a very broad question, and it is hard to answer that in any specific way. It could be wonderfully increased by going into certain available tracts of timber, by the extension of railroads and the opening up of logging operations in the entire Northwest.

Senator VARDAMAN. You have trees there for any size of timber that they might want for ships, have you not?

Mr. VAN DUZER. We have, up to the present time; yes, sir.

Senator MCNARY. Could the output be increased with the present equipment?

Mr. VAN DUZER. We are increasing that to-day with the present equipment; yes, sir.

Senator MCNARY. Is all of the output absorbed in wooden-ship construction?

Mr. VAN DUZER. All of the output of the logging camps?

Senator MCNARY. Yes; that is, I am speaking of the timber that is suitable for wooden-ship construction.

Senator McNary. Would not the letting of additional contracts stimulate production, Mr. Van Duzer?

Mr. Van Duzer. It is a very natural condition, that a man who has timber will not get into that timber unless he knows it is going to be used. That is about the best answer I can give to that question.

Senator Jones. Let me give you a concrete case, illustrating, I think, what would be the condition at the shipyards out there: We had the showing made before this committee that one yard in Tacoma, which has a contract for Government ships, with, I think, four ways, will have all those ships that are now under contract off the ways by the 1st of July; and if they could get contracts for ships, not only to occupy those ways, but for other ways, they would be willing to put in ways to accommodate at least 10 more ships and have them off the ways during this year. Is there any reason due to the lack of supply of lumber, in your judgment, for not letting those contracts?

Mr. Van Duzer. That I can not answer, Senator, with regard to the State of Washington, from first-hand knowledge. I would say that there was no reason, in regard to the available supply of lumber; but I would rather that Mr. Bloedel should answer that question as to Washington.

Senator Jones. What would you say as to the condition in that respect in Oregon—if such a situation were developed?

Mr. Van Duzer. I would say that if the Fir Production Board was given the proper authority the lumber would be made available.

Senator Jones. And would it be made available without expenditure by the Government in increasing railroad facilities, and things like that?

Mr. Van Duzer. As I answered that once before, I should say, generally, yes; although there may be some instances where the Government might be asked to loan money with which to make the proper extensions.

Senator McNary. When you spoke about the Government giving proper authority, did you mean giving authority to commandeer standing timber?

Mr. Van Duzer. I do not mean necessarily that. I mean give the authority to secure getting into it—well, practically, I could say, yes, to that, Senator; I can put it in that way.

Senator Vardaman. Is there a disposition among your people to withhold the lumber from the market?

Mr. Van Duzer. None whatsoever.

Senator Vardaman. Then, what would be the necessity for commandeering the lumber, if they would sell it readily?

Mr. Van Duzer. There is really no necessity for it, Senator, except for this: There has been no knowledge, up to the present time, as to what the program of the Shipping Board is. I might say that there are certain logging roads in our State, which, by the elimination of curves, or other defects in their tracks which prevent them from hauling over their road raw material, have not gone to the expense to remedy those defects, because they were not sure as to whether, if they did that, the material would be required or used.

Senator Jones. So that it is not a question of the necessity of commandeering in order to get lumber?

Mr. VAN DUZER. Senator, I am frank to confess that we have not as yet made a survey of that character. I can not answer that question at this time.

Senator HARDING. What I am trying to get at—I hope in a perfectly fair manner—is, what expenditure of money is the Government going to be called upon to make in order to have this timber made available for use?

Mr. VAN DUZER. Well, at the present time, unless the program is greatly augmented, it will not be necessary for the Government to make any expenditure.

Senator HARDING. Is it your notion that if these logging roads should be constructed, they would be constructed by the timber owners on advances of money from the Government, or would you have the Government construct the roads?

Mr. VAN DUZER. I would prefer the former method.

Senator HARDING. You would prefer to have the timber owner construct, with Government advances?

Mr. VAN DUZER. Yes, sir.

Senator JONES. In that connection, Mr. Van Duzer, these advances, if necessary, and if made, would be made to existing concerns, would they not?

Mr. VAN DUZER. Yes, sir.

Senator JONES. And not for the establishment of new concerns?

Mr. VAN DUZER. There are many instances where the extension of railroads, which at the present time, as you know, is very expensive, would be almost impossible without aid from the Government.

Senator JONES. But this Government aid would go to firms and companies that are already operating, and not for the creation of new establishments?

Mr. VAN DUZER. Generally speaking, it would, although there are some instances where it would be necessary to run a spur road from one man's railroad into somebody's timber, in order to get the material there. I might say, Senator, that that action would be necessary only in case of practically an unlimited number of ships being needed.

Senator JONES. Yes.

Senator VARDAMAN. That would not be necessary in the construction of the 200 ships to which you referred?

Mr. VAN DUZER. No, sir.

Senator MCNARY. Have you data showing the output for the year 1916 or the year 1917, in Oregon?

Mr. VAN DUZER. The output in 1916 in Oregon was about 1,600,000,000 feet.

Senator MCNARY. Was that in 1916 or 1917?

Mr. VAN DUZER. That was last year.

Senator MCNARY. That was in 1917?

Mr. VAN DUZER. Yes, sir; 1917.

Senator MCNARY. Was there any one factor, or more than one, that prevented the maximum output in 1917?

Mr. VAN DUZER. In the lumber production?

Senator MCNARY. Yes.

Mr. VAN DUZER. No.

Senator MCNARY. Was it affected by the car shortage in any way, or by labor difficulties?

Mr. VAN DUZER. There were more or less labor difficulties in the Northwest last fall, especially in Washington; in Oregon, we were practically free of that. The car situation is very bad at the present time. I have telegrams in my pocket stating that several mills will be forced to shut down unless they can secure some method of moving part of their fall-down lumber soon.

Senator MCNARY. Would you say that the car shortage was not a determining factor in the conditions last year?

Mr. VAN DUZER. No; it was not a determining factor.

Senator MCNARY. Did it restrict the output in any way?

Mr. VAN DUZER. Yes, in a way; it always does.

Senator MCNARY. Well, would you say to any considerable extent.

Mr. VAN DUZER. It was not as bad last year as it has been since no, sir.

Senator MCNARY. When can more lumber suitable for shipbuilding be provided?

Mr. VAN DUZER. Well, that is a very hard question to answer. It is being provided to-day; it could be provided immediately.

Senator MCNARY. Just what methods could be employed to produce that result?

Mr. VAN DUZER. Senator, the facts in the case are simply this: That the belief in the minds of the logging people that the Government is going to need a certain amount of material for ship construction, and will use a largely increased amount of material for ship construction, will produce it.

Senator MCNARY. Could they leave the tops in the forest in any way, taking out only that part which is to be cut into the timbers needed for shipbuilding purposes?

Mr. VAN DUZER. In case of an intensive program, yes, sir. There are many methods by which it could be done if we came to an absolute showdown.

Senator MCNARY. That is the point I wanted you to discuss; I want you to deal with that subject in a liberal way.

Mr. VAN DUZER. If we went into an intensive program in shipbuilding, whereby we must build every ship that could be built in Washington and Oregon, by means of intensive, or, as you might term it, "selective," logging, whereby men would be sent into the woods and a certain proportion of the timber either would not be cut, or at least would not be sawed, the output could be materially increased; but, of course, that would be at largely increased cost.

Senator VARDAMAN. What would be the increased cost?

Mr. VAN DUZER. That would be very hard to approximate just now. I could not do it offhand; I could not give any intelligent figure now.

Senator JONES. Will you describe the usual method of logging out there, Mr. Van Duzer?

Mr. VAN DUZER. The usual method of logging is, after the tree is felled it is bucked after being marked by a head marker, so to speak, into certain lengths——

Senator JONES (interposing). What I had in mind is as to taking all of the timber, or whether you select out certain trees?

Mr. VAN DUZER. Up to the present time all the timber fell has been taken and sawed, irrespective of the grade of the log.

Senator McNARY. And what percentage goes into the construction of ships?

Mr. VAN DUZER. At the present time, covering the Northwest, on the present specification?

Senator JONES. Yes; that is, the Ferris type?

Mr. VAN DUZER. Possibly not over a total average of 15 per cent; it might exceed that a trifle.

Senator JONES. And do you cut all the timber on a tract?

Mr. VAN DUZER. Yes.

Senator JONES. That is what I wanted to bring out. Do you do that under the normal method of logging?

Mr. VAN DUZER. Under the normal method of logging the tract is denuded, so to speak.

Senator JONES. Yes. So that, if you have to take up the method you suggested a moment ago, simply going in and selecting timber that is suitable especially for shipbuilding, that would entail more expense?

Mr. VAN DUZER. It would entail a great deal more of expense.

Senator McNARY. Have you anything further that you wish to present, Mr. Van Duzer?

Mr. VAN DUZER. No, sir.

Senator VARDAMAN. We are very much obliged to you, sir, for your statement.

We will now hear Mr. Bloedel. Will you state your full name, your occupation, and place of residence?

STATEMENT OF MR. J. H. BLOEDEL, OF SEATTLE, WASH.

Mr. BLOEDEL. My name is J. H. Bloedel, my residence is Seattle, and my occupation is that of lumberman. At present I am chairman of the Fir Production Board for several departments of the Government, for the purpose of producing lumber out on the Pacific Coast and shipping it.

Senator VARDAMAN. You may make any statement about the subject that you desire, Mr. Bloedel, in your own way.

Mr. BLOEDEL. I am a little at a loss as to what general statement the committee would care to have that would throw any light on this subject.

Senator JONES. I think, Mr. Bloedel, that what we really want to get at is, the supply of lumber that would be available for wooden ship construction in our State. As I said a few moments ago, it was suggested by some representative of the Shipping Board that they have doubts as to whether the supply of lumber on the Pacific coast was ample for their needs; and because of those doubts, they were not letting new contracts for the construction of wooden ships, and did not expect to do so until they had more information.

I know that you are thoroughly familiar with the situation out there; and the committee would like to have you give your views with reference to that situation.

Mr. BLOEDEL. I think their expressions of doubt, in a way, were justified, from the results that we had, generally, from the lumber districts last year. That referred just as much to the South as [illegible] to the West. There was a wooden ship program outlined, whi

rather comprehensive. I think it meant the building of some 250 wooden ships in the South, and the building of a considerable number—some 150 to 200—on the Pacific coast.

You must understand, Senator, that we had not built wooden ships out on the coast of these large sizes for a long time. The steel ships have taken the place of the wooden ships, especially in ships of large tonnage; and the facilities for cutting long timbers, first, in the woods, and, second, in the sawmills, had been disregarded in the construction of mills; and those in the industry had, in a measure, worked differently along other lines for producing lumber than they would for producing shipbuilding lumber.

In a way, the production of shipbuilding lumber is a specialty; it is a somewhat different thing from simply producing lumber out of logs. We, on the Pacific coast, as we got out of the practice of sawing specialties, began to go into a general sawing business—that is, began to go into a general lumber business, to supply lumber for building houses, and so on.

That is one reason why last year the industry was not speeded up to the same tension and intensity that it is now. For instance, the whole program of building ships begins with cutting the right size tree in the woods. A good many loggers last year were unfamiliar with the lengths and sizes that were wanted, and some of them put in the wrong lengths and the wrong sizes, and therefore found no ready sale for their trees or their logs, and were disappointed, and no more were put in.

Now, that has been straightened out. There is now practically a definite schedule of a standardized Ferris type ship agreed upon. There are still also plans by individual shipowners which will be at variance with these plans, as each man has an individual opinion for building a better ship. Still, there is a standard ship, and that standard ship for the west coast has a standard schedule of the lengths and sizes of timbers to which everybody can cut.

And what we would like to get—the lumbermen from the Pacific coast and the Fir Production Board—is, what the definite program of the Emergency Fleet Corporation comprises: how many wooden ships do they want to build? When we know what their program is, we will be ready to get in and get the material. We have canvassed the situation in a way to show the production of long logs.

And in the State of Washington we have estimated that we can produce, within one year from March 1, a matter of 250 ships. That is a conservative estimate. I think Mr. Van Duzer told you that on the Columbia River they can produce 200 ships. That will be an intensified program of 450 ships for those two States.

So far as the State of Washington is concerned, those figures are thoroughly conservative, and I think they are also in Oregon for that matter.

But it means this: First, that we must have a standardized schedule to which we can cut. Second, that we must go to the timber owner and the logger who, as you know, in our country is an independent factor and not part of the mill operation, and he must be given a standard schedule to cut to.

Then the logs will be produced, and the next thing is to put it up to the sawmill operator. Now, as far as the sawmills are concerned,

ıve ample sawmill capacity to saw a great many more logs than
kely to be put in. We have ample sawmill capacity to cut more
enough timber for 250 ships, because, as you know, practically
e mills work on one shift, and many of them could work double
and produce double the amount they would produce with one
provided the logs were produced out of the woods.
that, so far as an intensified program is concerned, if it were
necessary and desirable that 400 or 500 ships should be pro-
on the Pacific coast in one year, it can be done. Sooner. I
add further that that, of course, is based on the standardized
schedule, which means a keel [illegible] feet,
which means a very large [illegible] of lumber [illegible] of the
000 feet of lumber entering into the [illegible]
850,000 feet consist of lumber that [illegible] logs from [illegible]
feet long. Now, you can easily understand that it is hard to
That means that only 650,000 feet of that [illegible] lumber
e of those ships is shorter than [illegible]
ator JONES. But, as I understand you, it can be obtained on the
c coast?
BLOEDEL. It can be obtained.
ator JONES. It is simply a question of the cost?
BLOEDEL. Yes; it is a question of cost; it is a question of
ng what the Government [illegible] and what it has to
ator JONES. Well, we want ships.
BLOEDEL. That is a question of a program. If you will [illegible]
definite program—if the [illegible] Fleet Corporation,
ose in authority, will [illegible] program and say to the
ermen of the Pacific coast that [illegible] number of ships and that [illegible]
ic coast, I think I [illegible] State of Wash-
n, that we can produce [illegible] I [illegible] Mr. Van Dusen
ind in his judgment, as expressed [illegible]
what can be done in the State of Oregon.
ator JONES. Of course, the matter of a program [illegible] ter the jurisdiction of the Emergency Fleet Corporation. W.
opriate the money [illegible] get the ships.
BLOEDEL. I might add that [illegible] the
of the schedule we have discussed [illegible]
figuring that approximately [illegible] ships [illegible]
acific coast.
ator JONES. That is what I wanted to know.
BLOEDEL. If you adopt a schedule as easy as the southern
r-pine schedule a good many more ships could be built. That
matter of judgment. I will say this, that we have [illegible] the
r-pine schedule will permit of building a good ship, but that
rs of longer lengths will make a better ship. [illegible] yield-
ving a longer life is what is wanted. Now, that is a question
lgment for the shipbuilders.
ator JONES. Let me ask you this question: If the Emergency
Corporation were to adopt a definite program such as out
by you, what additional aid, or what aid, would the Govern-
have to give, in order to carry out that program? Would it
to give anything to the loggers or to the sawmill people or to
ipbuilders?

Mr. BLOEDEL. I can answer that only in a general way, by saying that I do not think there would be any material aid required for the industry out there to carry out such a program. I think there is enough development in the logging camps and in the sawmills so that the program that I have outlined can be produced. What you need is to get after those fellows and pound them on the back and say to them, "Here is a definite program, and here are the logs that you must cut"; if you talk to them that way, and would have a definite program, I think it could be produced. There might be instances where a little money would have to be advanced by the Government for extending a man's little road, the same as the Spruce Production Board has done. But I do not think that that would require a substantial sum or would need any consideration on the part of Congress; it would be a comparatively small matter.

Senator VARDAMAN. Have you ever discussed this question with the Emergency Fleet Corporation?

Mr. BLOEDEL. Yes, sir; we are having conferences with them now on the subject, and they are not concluded. We came here to Washington just a few days ago and we had one conference, which was postponed till some further information could be obtained; and I am confident, Senator, that we can get that definite program. I think, in justice to the Emergency Fleet Corporation, it should be said that they have not heretofore had any definite figures from the coast which were close enough for them to base their estimates on, and now that they have the figures I think we can get some results.

Senator JONES. I think it would be well for you to answer this question for the record: You were selected by the Emergency Fleet Corporation some time ago to make that survey in the State of Washington, were you?

Mr. BLOEDEL. In the State of Washington; yes, sir.

Senator JONES. And you are here now to report on that, are you?

Mr. BLOEDEL. Yes, sir; and we did report the other day, and the matter is now under consideration. I think we will get results out of it; it is being considered. They have not had anything to base their figures on heretofore. They had last year's figures before them; and I confess that their program was somewhat interfered with. They did not get the results from the South or a part of the results from the West that they had the right to expect.

Now, please understand that in addition to the program which I have just outlined, we expect to furnish that part of the ship units necessary for the construction of the southern ships which they can not furnish. Out of the 1,500,000 feet of lumber in a schedule for one of their ships they are about 4,000,000 feet of long timbers, and it is very hard for them to get those wide flitches; and we have furnished now the large timbers for 100 units, and we are to furnish it for 30 units more, making 130 ships in all. In addition to that we have been furnishing all the long size timbers which the Government needs in the other departments. In other words our industry on the Pacific coast is called on to furnish that lumber which the Government can not get from anybody else.

Senator JONES. You think you can do that if they adopt the definite program?

Mr. BLOEDEL. We can. But what I am coming up to is this. That we have been furnishing all the lumber that the Government could not get from anybody else, and we were allowed to hold 80 or 90 per cent of the stuff, and that we would like to dispose of.

Senator JONES. You say you have been "allowed" to hold it. You mean that you have been required to hold it, do you not?

Mr. BLOEDEL. Yes; we have been required to hold it.

Senator HARDING. Does that lumber deteriorate in value, or is any injury to the industry, except that it ties up the money?

Mr. BLOEDEL. It ties up the money, and it ties up the space for storage around the plants. And that is going to be a serious thing with us. In fact, our whole program is predicated on the fact that we have got to have shipping facilities for our lumber; we must have cars or ships out there to take our lumber, otherwise this whole program is of no value, because otherwise our producers will certainly decline because of the necessity of the small mills closing up, either because they can not carry the stock in the yards on account of lack of room, or because they have not the money that would be tied up in that way.

Senator JONES. That is, the success of this shipbuilding program you have suggested depends upon the ability of those people to use the lumber that is cut for use in the ships is you put it?

Mr. BLOEDEL. That is the point.

Senator VARDAMAN. Have the transportation conditions on the railroads improved very much since the Government took over the railroads?

Mr. BLOEDEL. Not very much. There has been a shortage of cars for six months.

Senator VARDAMAN. A shortage of cars, or a shortage of engines?

Mr. BLOEDEL. I could not answer that question definitely, but I think it is a shortage of everything—engines, cars, power, equipment, etc.

Senator HARDING. May I ask if this enlarged wooden-ship program contemplates the establishment or erection of new shipyards?

Mr. BLOEDEL. It would, necessarily, because there are not enough ways and yards now in existence to build all of that number of ships.

Senator HARDING. How long would it take to get them under way?

Mr. BLOEDEL. It would take some time; new yards are not now easily established.

Senator HARDING. When could the ships that you have in mind be delivered to the Government?

Mr. BLOEDEL. I beg your pardon.

Senator HARDING. When could these additional wooden ships begin to be delivered to the Government?

Mr. BLOEDEL. Well, there are contracts out there now, I think, for about 152 ships under way. Those would have to be completed. That is for the Fleet Corporation to determine. I think the contracts for outside parties, such as the French Government and others—well I said "contracts," but there are 30 ways under construction in the State of Washington; I can not say just what the number is in Oregon, but I think Mr. Van Duzer said 20.

Now the plan contemplates, of course, taking care also of present contracts for private ships.

Senator HARDING. I understand. What I am trying to get this: If this committee was to be called on to recommend the a tion of this program—probably it could be done without that, b we are going to be called upon to determine as to the adoptic that program, I would like to know when you would begin to us more ships from that program. Do you think you could de any in 1918?

Mr. BLOEDEL. On the new program?

Senator HARDING. Yes.

Mr. BLOEDEL. Yes, sir. Such a program as I have outlined w mean the delivery of pretty nearly—practically a ship a day, it was well started; 400 ships a year; if it were well started, under way, that could be done.

Senator HARDING. Do you mean that you could construct yards and ways and deliver ships at that rate during the pr year?

Mr. BLOEDEL. No; that is impossible.

Senator HARDING. That is what I thought.

Mr. BLOEDEL. No.

Senator JONES. But I would like to say that Mr. Rhodes, o Tacoma Shipbuilding Co., was here sometime ago, and he said if he could get a contract his company could launch 12 more this year.

Senator HARDING. That is different.

Senator JONES. That they could put in new ways and laun more ships if they could get contracts, but they could not get tracts.

Senator VARDAMAN. Why not?

Senator JONES. The Shipping Board would not let them.

Senator VARDAMAN. Why?

Senator JONES. They claimed they were afraid that the ship would not have the material.

Senator VARDAMAN. Well, I do not see why they should witl the contracts.

Senator JONES. Well, they also claim that the price of this cern was a little high; but I think that could be adjusted all r that ought to be adjusted. But he also said that that was wha shipyard could do, and they wanted to do it if they could get the tracts.

Senator HARDING. A remark of Senator Jones suggested this tion: This proposed program contemplates an increased pric lumber, does it?

Mr. BLOEDEL. Well, that is a matter that I presume can b justed between the lumbermen and the Fleet Corporation, alth our program as we outlined it did not have anything particul view regarding that.

Senator HARDING. Well, the gentleman who immediately pre you, I think, spoke of the necessary increased cost in an inte program.

Mr. BLOEDEL. My program as given here was not an intensive gram, Senator. My program was a normal program that we furnish from the facilities which are now there.

Senator JONES. In the normal way of harvesting lumber?

Mr. BLOEDEL. Yes, sir.

Senator VARDAMAN. How many ships [illegible] during the year [illegible]?

Mr. BLOEDEL. During the year [illegible]

Senator VARDAMAN. [illegible]

Mr. BLOEDEL. It would be impossible [illegible] tion intelligently. Senator [illegible] buildings under this program [illegible] has been the production [illegible] question that may be asked.

Senator VARDAMAN. What is the difference [illegible] ship in Washington [illegible]

Mr. BLOEDEL. I would be [illegible] that the lumber is cheaper on the [illegible] of Mexico; and the cost of lumber [illegible] cheaper than it is on the Pacific coast.

Senator HARDING. That could be [illegible] the policy of the Government [illegible]

Senator VARDAMAN. They are going to fix [illegible] understand.

Mr. BLOEDEL. The lumber on the Pacific coast is quite a good [illegible] cheaper than it is down on the Gulf coast; that is, one for [illegible] material for material. They use shorter lengths and [illegible] more labor on their ships. So that they get a lumber which [illegible] on the average, about the same price as ours, but use a great deal more of labor, although not at a higher price per day. So I could not tell you what the difference is in cost; but piece by piece, our lumber is a good deal cheaper than the southern pine lumber.

Senator JONES. Mr. Bloedel, as I understand, while you are not able to say how many ships could be launched this year, because you are not a shipbuilder, you do make the statement that the people on the Pacific coast can furnish the lumber to carry out this program of ships as rapidly as the Government wants to carry it out?

Mr. BLOEDEL. Yes. I want to say, Senator Harding, that I can not speak as to the ability of the shipbuilders to produce the ships, but I can say that we can produce the material for the number that we have spoken of.

Senator JONES. Yes. Is there any necessity for the Government commandeering timber out on the west coast?

Mr. BLOEDEL. So far, Senator Jones, every one there has shown a splendid spirit in coming to the front to assist the program; I have not found a single instance where there has been any refusal. I should hesitate to say that it would be necessary for any commandeering bill to be passed; but such a power might be a good thing for the Government to have, because if they knew that the Government had the power they would do the things that they ought to do without being forced.

Senator VARDAMAN. You think the exhibition of power would prevent the necessity for using it, do you?

Mr. BLOEDEL. I am quite sure it would.

Senator JONES. But you have not seen any such necessity out in our country, have you?

Mr. BLOEDEL. So far there has been no such necessity whatever out in our country; there has been shown among the timbermen a

the loggers and the mill men in our country the spirit to do everything in their power. To illustrate that, I may say that the intensive program to produce the spruce for the Air Craft Production Board meant that they were permitting men to go out into the forests to cut individual trees, scattering the tops and the limbs, and the leaves, and thus increasing the fire hazard in those forests, and cutting only one tree, practically, in ten; and leaving that material there exposed to the fire hazard; and one of the biggest timber owners out there willingly consented to that, and not only consented to it, but urged the program. And the Air Craft Production Board men are out there now working in the forest, where they are taking nothing else but spruce; and that is the most wasteful process that you can imagine from the viewpoint of the economical operation of the forests; but it is a method that is necessary in order to get quickly the amount of spruce that is required. And that is what the timber owners are going out there, which would seem to show that they require no commandeering law.

Senator JONES. That also means considerable damage to the standing timber, does it not?

Mr. BLOEDEL. It does; and it is a great fire hazard. And the biggest timber owners in Oregon and Washington have been the ones most willing to do that. And I want to say this, in justification of George Long, about whom there has been some criticism before this committee——

Senator JONES (interposing). That criticism was not before this committee, but before the Committee on Military Affairs; but I would be glad to have you correct that so that it will go into the record.

Mr. BLOEDEL. George Long is the head of the largest timber-owning concerns out there; and he was the one that led in the movement to produce live spruce by the process that I have just described; and a great deal of their timber has been used in that way.

Senator JONES. I think the criticism of Mr. Long was on the ground that he was connected with the Weyerhauser interests out there, and that that would influence his judgment.

Mr. BLOEDEL. He has shown a greater public spirit than could possibly be expected of large holders.

Senator VARDAMAN. Are there any other questions? If not, we are much obliged to you, Mr. Bloedel.

STATEMENT OF MR. LLOYD J. WENTWORTH, OF PORTLAND, OREG.

Senator VARDAMAN. Will you state your name and the capacity in which you are serving the Shipping Board?

Mr. WENTWORTH. I am district supervisor of district No. 11, which comprises the Columbia River and Oregon territory north of Coos Bay.

Senator MCNARY. Have you made a survey of the plants used in Oregon for the construction of wooden ship?

Mr. WENTWORTH. I am familiar with the plants in my own district—the Columbia River district.

Senator MCNARY. How many vessels are in course of construction?

Mr. WENTWORTH. If you are going to need much detailed data, I will have to refer to my papers.

Senator McNARY. Well, [illegible]

Mr. WENTWORTH. The [illegible]
River, including [illegible]
are going to [illegible]

Senator McNARY. [illegible]

Mr. WENTWORTH. [illegible]
Fleet Corporation [illegible]
addition to that, [illegible]
pleted [illegible]

In the Coos Bay [illegible]
they have [illegible]
early, making [illegible]
Coos Bay Shipbuilding [illegible]

We have on the [illegible]
two ways in [illegible]
four ways for [illegible]
ever built [illegible]

We have the [illegible]
ways and [illegible]
and over that the [illegible]

That makes something [illegible]
Oregon, including the [illegible]
ways in the State.

Senator McNARY. [illegible]

Mr. WENTWORTH. [illegible]
capacity.

Senator McNARY. [illegible]

Mr. WENTWORTH. [illegible]
number of men in my own district, [illegible]
comes a point [illegible]
tion, where [illegible]
due to the [illegible]

Senator McNARY. [illegible]
yards be increased and what method [illegible]
bring that about. [illegible]

Mr. WENTWORTH. [illegible]
ber of ways [illegible]
out more [illegible]
could work, possibly, a night shift [illegible]
tion in that way, [illegible]
and labor are available for these new yards [illegible]
men in the organization that are already there.

Senator McNARY. Does that situation obtain [illegible]
material and labor are both available for [illegible]

Mr. WENTWORTH. At the present time, at least, we have had an ample number of men. We have had more men than could possibly be used in that particular district. That is, I will not say that they are all trained shipbuilders, but they could be made [illegible] and shipwrights, by working in the yards [illegible] a force of 7,000 or 8,000 men in that district.

Senator McNARY. What would be the maximum output for wooden ships in your district?

Mr. WENTWORTH. In this district?

Senator McNARY. Yes.

Mr. WENTWORTH. Well, they have, say, 53 ways—the Fleet Corporation ways, I am speaking of.

Senator McNARY. I understand.

Mr. WENTWORTH. And it is entirely practical to expect that those ways could be turned twice in 12 months, and that would give you 106 ships as a minimum.

Senator McNARY. As a minimum?

Mr. WENTWORTH. Yes, sir.

Senator McNARY. But I believe Mr. Van Duzer said a while ago that 200 ships would be built annually out of the timber available for ship construction in that State?

Mr. WENTWORTH. Well, I believe you can.

Senator McNARY. They can do that, can they?

Mr. WENTWORTH. Yes, sir.

Senator McNARY. Whereas there are being constructed at this time by the Emergency Fleet Corporation something like 53 vessels?

Mr. WENTWORTH. No; by turning the ways twice, in my particular district, District No. 11, which is the Columbia River district, you would get from the ways already laid there that are working on Government contracts 106 ships. Then you have 10 ways of the Foundation Co., which would give you, if they turned twice, 20 more ships. Then you would have probably 10 other ways that are there or will be available within the next 60 days.

Senator McNARY. Are all the yards that are capable of producing ships working now?

Mr. WENTWORTH. They have one yard in Portland, with two ways, that launched a vessel within the last 30 days; so far as I know, they have no contracts at the present time. The yard of the Columbia Engineering Works, near Linnton, is building, and has practically completed, some of the smaller type of vessels, of approximately 1,200 tons. They will soon have those ways empty again, and so far as I know they have no contracts. I could not say that positively, but so far as I know they have no contracts of any kind.

Senator McNARY. I see.

Mr. WENTWORTH. That particular yard would have to have some additions made to it in order to handle the larger and heavier type of vessel. There is another yard in Portland that is going ahead, too, and putting in its own yard, with the expectation that it will be given some Fleet Corporation contracts; and if not, they will be able to build for private account.

Senator McNARY. Are all of these idle yards now in the State capable of constructing wooden ships?

Mr. WENTWORTH. Are they?

Senator McNARY. Yes; those that you have mentioned?

Mr. WENTWORTH. Yes; they are, with one exception. The Kennon & Kern and the Columbia Engineering Works yards have already built vessels. There is one yard with four ways that I mentioned, in Portland, that is putting in its own plant; that is a new yard; they never constructed ships there; it is what they call the Oceanic Shipbuilding Co.

There is another yard which I overlooked; they have one or two ways in. They have not entirely completed their organization and no contracts have been given them.

Senator McNARY. Where is that yard located?

Mr. WENTWORTH. Between St. Helens and Columbia City, Oreg.

Senator McNARY. Well, are there any yards idle or not going at their full capacity that have heretofore had contracts awarded to them by the Shipping Board?

Mr. WENTWORTH. Well, the shoe has been on the other foot; they have been hurrying the other fellow up, rather than let the ship builder slow up; in other words, we have been trying in our office to speed up production of the yards that are building for the Government, and up to the present time there has been no slowing up of production that I know of.

Senator McNARY. Have those yards all the contracts for ships that they can handle?

Mr. WENTWORTH. No: some of our yards there will have to have contracts right away—should have them right away.

Senator McNARY. Then the maximum output has never been reached in the construction of wooden ships in Oregon?

Mr. WENTWORTH. Has never been reached?

Senator McNARY. Yes.

Mr. WENTWORTH. Well, that might be a debatable question. We can produce ships faster now than we could six months ago, because we have a large army of men that have learned the ways of ship building.

Senator McNARY. Then the yards now building in Oregon could handle a good many more contracts and produce a great many more ships than they are now if they were given contracts?

Mr. WENTWORTH. Well, the present yards [illegible] work on Fleet Corporation [illegible] additional contracts for [illegible] working faster. The yards [illegible] 10-hour shifts are required [illegible]

Senator McNARY. Then it is the policy of the Emergency Fleet Corporation to speed up [illegible] district, of which you are [illegible] a great many more ships than they are now building?

Mr. WENTWORTH. Yes; [illegible]

Senator McNARY. How much [illegible] than it is at the present time?

Mr. WENTWORTH. Well, [illegible] judgment.

Senator VARDAMAN. [illegible]

Mr. WENTWORTH. Yes, [illegible] mentioned before, and the [illegible]

Senator VARDAMAN. You think that [illegible] State of Oregon would be about [illegible]

Mr. WENTWORTH. Yes, unless [illegible] and working to every disadvantage.

Senator VARDAMAN. That is what [illegible] body in this kind of work [illegible]

Mr. WENTWORTH. Well, the [illegible] the completed vessel; the machinery and equipment [illegible] along. Whether or not we can [illegible] hulls by machinery, engines, etc., is a question that I can not ans because I have no knowledge about that.

Senator VARDAMAN. Well, I think the purpose of this inquiry was to discover exactly the amount of lumber that you can furnish.

Senator McNARY. That is the proposition in which we are interested.

Senator VARDAMAN. Of course, the perfectly equipped ship will depend, not upon the products of your forest, or probably of your manufactories, but upon the machine-manufacturing concerns of the East or of the Middle West. The thing that we want to know, however, is whether or not, if the contracts were given to the people out there, the number of ships that you could construct and the earliest possible moment at which you could construct them.

Mr. WENTWORTH. From a timber and lumber standpoint?

Senator VARDAMAN. Yes; that seems to have been the objection to giving you contracts, was it not?

Senator McNARY. That is the inquiry to which I intended to direct my question, Mr. Wentworth—with regard to the lumber?

Mr. WENTWORTH. Well, I think I can safely say that you can produce lumber in Oregon and Washington for 400 wooden ships—possibly more—as a minimum.

Senator McNARY. As a minimum per year?

Mr. WENTWORTH. As a minimum per year; that, I think, would be a safe estimate.

Senator VARDAMAN. And you agree with the gentleman who preceded you that it would require no marked increase in price over that which they are getting now, or in cost to the Government?

Mr. WENTWORTH. I think it would not.

Senator McNARY. Nor would it require any governmental assistance in the way of financing any of those concerns?

Mr. WENTWORTH. I doubt if it would.

Senator McNARY. What will occur to those ways when the ships now being built are completed?

Mr. WENTWORTH. Well, unless the yards are kept in contracts, of course the ways will become empty.

Senator McNARY. Yes; but so far as the policy of the program is concerned, is it the idea to keep the ways provided with contracts?

Mr. WENTWORTH. I think it will be; of course, I do not make the policy.

Senator McNARY. Have there been any of the Ferris type ships completed in your district?

Mr. WENTWORTH. Not in my district; there will be one launched this month.

Senator McNARY. At what place?

Mr. WENTWORTH. At the Coos Bay Shipbuilding Co. yard. I think we have seven vessels in the water now on the Columbia River; one from the Peninsular Shipbuilding Co.; one from the Sommarstrom Shipbuilding Co.; and there should be one from the Grant-Smith-Porter-Guthrie Co., of the Hough type.

Senator McNARY. There is no difficulty experienced in the procurement of labor—the man power for those contracts—is there?

Mr. WENTWORTH. Not up to the present time. The labor situation has been very satisfactory, and everything has been very quiet and peaceful for some time.

Senator VARDAMAN. We thank you for your statement.

Senator McNary. I will ask Senator Day to make a statement to the committee now.

STATEMENT OF HON. I. N. DAY, STATE SENATOR, PORTLAND, OREG.

Senator McNary. Senator Day, you are familiar with the construction end of wooden ships, are you not?

Senator Day. Yes.

Senator McNary. You and your associates have been engaged in that line of work for a number of years, have you not?

Senator Day. Yes, sir.

Senator McNary. The purpose of this inquiry, as I stated in the beginning, was to develop the fact that lumber was available for ship construction upon an augmented program of the Shipping Board. I wish you would generally present the matter as you view it, from the construction end, and the study that you have made of the subject.

Senator Day. From the construction end?

Senator McNary. Yes; or generally, in any way that you might care to develop the subject from the thought that you have given to it.

Senator Day. Rather exhaustive surveys of the situation relative to the production of material have indicated that the supply of lumber is ample. At no time since the commencement of shipbuilding in Oregon has there been any shortage of labor. The introduction of machinery into the fabrication of wooden ships has largely supplanted skilled labor. The old shipbuilder is almost extinct. was almost extinct at the beginning of the war. I have at times myself employed the entire ship carpenters' union in the Oregon district upon the construction of some ocean-going barges. I do not think at that time there were over 60 or 70 real ship carpenters in the district following that vocation. The application of air to boring machines and the use of air hammers have expedited the work to a very large extent; and we have been enabled to make over, or utilize, the labor of men who are known as house carpenters and bridge carpenters in the construction of ships.

The invention of the Stetson-Ross planer at Seattle permits of shaping of the mold timbers for planking, ceiling, etc., and one of those machines will take the place, hardly, of 10 or 20 skilled axmen; by the use of the tilting [illegible] almost entirely the axmen from the shaping of the molding frame. And by reason, as I say, of the adaptation of [illegible] construction we have been enabled to [illegible] have been spoken of here to-day. [illegible] mind that with the amount of [illegible] mented program is entirely feasible.

Senator Vardaman. [illegible]

Senator Day. No [illegible]

Senator Harding. [illegible]

Senator Day. Yes, sir; [illegible]

Senator Harding. Not [illegible]

Senator Day. In this way, [illegible] on which we started with [illegible]

who became sufficiently expert that by the time our ship was finished the calking was done. These same men who went to work for us as beginners are to-day working on Government ships at full union wages, and their work is entirely satisfactory. Whether that is because men of this age adapt themselves more quickly to conditions than those of generations that have passed I do not know, but it is a fact that the calking situation is not to be looked upon with great fear. In addition to that, a calking machine has been perfected, and is now promised to be turned out in a month or two, which will practically solve the question of calking ships, as machinery has solved the question of the axe man and of the skilled shipworkers.

Senator VARDAMAN. Do you agree with the gentleman who preceded you, that if this contract could be given to you your manufacturers or mill men are in a position to execute it without any great delay to the Government?

Senator DAY. I agree with that wholly. There are two things that, in my judgment, are necessary to be done: First, the determination of a fixed program, and the immediate entry upon the carrying out of that program, in order that the loggers may know the output that will be necessary; and, second, the adoption of an arrangement for a commandeering authority, or the passage of a bill now before Congress permitting the United States to commandeer any products necessary.

(At this point the chairman entered the committee room.)

Senator DAY. While such authority has not been necessary in the past, it is very easy to see how delays might occur. In the extension of roads into new tracts of ground rights of way must be secured. The acquisition of rights of way is frequently a matter of some negotiation before the right to enter upon the land is finally secured. The authorities having determined that certain timber is necessary, work should commence at once, and the determination of the amount to be paid for that right of way might be left for settlement after the right of way had been taken over.

I know from conversations with men connected with the spruce board that a want of authority seriously hampered them in their operations last fall. The adoption of an intensive program such as has been outlined here—not, perhaps, contemplated, but outlined—would raise this very question as to whether or not timber should be selected upon tracts and the timber refused be allowed to stand. Questions of that kind involve serious consideration and take up much time. The owner is bound to view the matter from his standpoint, from the point of view of his interest, believing that the damage that is going to be done to his timber is very great. The people going in upon his land might have a very exalted idea as to how much should be paid him for timber and how much he should for reasons of patriotism contribute to the speeding up of the war program of the Government. Therefore, I say, that in view of the fact that you may at any moment adopt an intensive program, the authority should exist for the United States Government to take timber products and other products necessary for the conduct of the war without any further litigation.

The CHAIRMAN. Are we to understand from your remarks that you are in favor of the Government's commandeering timber wherever it can find it?

Senator DAY. I am in favor of the authority being granted, so that if the emergency arises it will not be necessary to come to Congress for that authority.

The CHAIRMAN. Would you include authority to take over logging outfits and conduct logging operations by the Government?

Senator DAY. I do not think it is necessary for the Government to take over logging operations. I think the logging operations can better be conducted by the citizens of that territory.

Senator HARDING. You would not give them the commandeering authority, would you?

Senator DAY. I do not suggest that it be given to individuals; I suggest that the authority be given to some governmental authority to indicate what timber should be taken.

Senator HARDING. Is this going to have any effect on controversies over rights of way to timberlands?

Senator DAY. A controversy over right of way might occur in any case. The granting of this authority would not be the origin of the controversy. I would take the right of way and settle for it afterwards during a period of war.

The CHAIRMAN. You would not [illegible] the extent of taking over sawmills?

Senator DAY. No, sir; it is [illegible]

Senator VARDAMAN. Do [illegible]

[illegible] had that power, as you suggested [illegible]

[illegible] had it would prevent the [illegible]

Senator DAY. I do; I [illegible]

[illegible]ising. For instance, [illegible]

[illegible] down [illegible]

[illegible] acquire that right [illegible]

[illegible] fit to hold [illegible]

[illegible] valuable [illegible]

[illegible] circumstances [illegible]

[illegible] lawfully [illegible]

[illegible] portion [illegible]

[illegible] timber [illegible]

[illegible]rogram.

[illegible]

Senator D[illegible]

The C[illegible]

[illegible]orted fr[illegible]

Committ[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Sary. T[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Senator DAY. I would favor the passage of a bill of that kind. I think the authority should exist in the executive—are you asking my opinion, Senator?

The CHAIRMAN. Yes; certainly.

Senator DAY. The authority should exist in the executive departments of the Government during time of war to perform every act necessary for the conduct of the war and the success of the Army.

The CHAIRMAN. I understood you a moment ago to say you would not favor the Government's taking over the sawmills?

Senator DAY. I said "necessary." I do not think the taking over of sawmills is necessary, but the authority would be there, and any time the Government thought it needed a sawmill it could take it over.

The CHAIRMAN. Do you find conditions in your part of the country such as to make you believe it necessary to give this authority to take timber? If so, why? What are the conditions that would justify legislation authorizing the President, through such agencies as he might select, to seize timber, lumber, logs, or machinery and pay for them afterwards at reasonable rates?

Senator DAY. In the State of Oregon there is a very valuable spruce tract down in the Alsea country, so called. In the State of Washington there is an unused logging road that has gone through bankruptcy proceedings, and it has several miles of rails, numbers of logging trucks, and locomotives. The Government wants that logging road transported from its present location in Washington, where it is worthless, to Oregon, to be used in the production of spruce. There is no authority, so far as I have been able to learn, that will permit Col. Disk to take that material and adjust the matter afterwards. He should be granted that authority, because there is a scarcity of rails and a scarcity of locomotives, and no better purpose could be found for that railroad plant than the use that Col. Dix proposes to put it to. Under this bill the road would be transported down there immediately.

The CHAIRMAN. Does he not have power now to purchase it?

Senator DAY. As I said, it has been through bankruptcy proceedings; I do not know that the proceedings have been completed; it has been involved in litigation for a number of years. I merely cite that as one instance where the commandeering authority could be exercised to the advantage of the Government. There may be numberless others.

Senator MCNARY. Senator, in what way could more lumber suitable for shipbuilding be provided?

Senator DAY. More lumber would be provided by the selective system of logging or by leaving the tops in the trees, or if all the logging activities were coordinated under the authority of the Government inspector; for instance, if Mr. Wentworth had authority to say to the various logging companies, "Cut logs 60, 80, and 90 feet long. Pay no attention to your individual orders; we are going to take all the logs that you will cut."

Now, much has been said here of the patriotism of the people out there, and I have nothing to say to the contrary. Understand, in contravention of that, I am impugning no actions of any of the loggers out there, but up to the present time they have not attempted

tell the loggers what they should do. If the logger, for instance, has his individual order from the sawmill, he cuts so many 60-foot logs, so many 80, and so many 90, without any reference to supplying some other mill or some other ship order. Mr. Wentworth could keep track of all the logging activities in his district and direct the different logging camps to produce the kind of logs necessary to supply the needs of the Shipping Board. That would greatly increase the production of the timber needed in the construction of ships.

The CHAIRMAN. But that would interfere with the mills fulfilling their ordinary contracts, would it not?

Senator DAY. I am going upon the theory that all things must bend to the urgent necessity of the country for ships. Yes, everything must bend to that necessity.

Senator McNARY. Would the building of ships different from the Ferris type, particularly smaller, help in any way in the supply of lumber?

Senator DAY. If a wider range were adopted in the construction of ships—for instance, if ships of from 2500 to 3500 tons were contracted for—many timbers could be utilized that are now not utilized in the 3,500-ton ships, though there is not such a very great difference.

I am not here to criticize that program, but it does [illegible] that if the South were permitted to build those ships of a smaller tonnage timbers were adapted to and the Pacific coast were permitted to extend its activities to the limit, greater progress might be made and the transportation facilities of the country would not be [illegible] they are now, hauling ship timbers from the South from the Northwest.

Senator VARDAMAN. Do you really think—and that is part of the purpose of this inquiry—that if the Shipping Board should [illegible] contracts and fix the standard and let the people of the West, Oregon and Washington—know just what they wanted they could produce in the next 12 or 15 months 40 or 50 ships?

Senator DAY. There is no question about it.

The CHAIRMAN. You may have covered this before I came in, but how are they doing out there now?

Senator DAY. I think they are making very fine progress all along the line.

Senator VARDAMAN. It was brought out, Senator, that the cause of the delay has been the failure of the Government to establish a standard and outline a program.

Senator McNARY. What can you say, Senator, about the idle yards? Are there any idle yards in your district?

Senator DAY. There are a number. Mr. Wentworth has told of the yards that are idle on the Willamette and Columbia Rivers.

Senator McNARY. Do you believe that the maximum capacity has not been reached by the yards available for ship construction?

Senator DAY. It is self-evident it is not being reached. When the yards are idle, and the yards are idle, the maximum output is not being maintained.

Senator McNARY. What is the situation as to labor—the man power?

Senator DAY. Labor up to the present time has been super dant. There has been a surplus of labor, and men are contin asking for employment at the shipyards.

Senator MCNARY. Is there any further statement you wi make?

Senator DAY. No, sir.

Senator VARDAMAN. We are very much obliged to you, sir.

Senator MCNARY. I would like the committee to hear Mr. Ra next.

STATEMENT OF MR. F. H. RANSOM, LUMBER MANUFACTU PORTLAND, OREG.

Senator MCNARY. Will you kindly state the general line of ness in which you are engaged, Mr. Ransom, and proceed wit statement you desire to make?

Mr. RANSOM. I am interested in the manufacture of lumber incidentally, in logging operations. I am not interested in shipbuilding yard, but we do manufacture a good deal of lu that goes into vessels.

There are some elements that have not been touched on that into the production of lumber that we may possibly need some ernment aid in getting. The market in the Northwest has at been almost depleted of certain sizes of wire cables. The lo industry probably uses more wire cable than any other ind in the West, not excepting mines, and even more than the oil i try. We no longer log in the old-fashioned way with ox tea horses, but are using railroads, requiring constant replaceme locomotives and new rails. The market is absolutely bare of r e West for logging roads. Locomotives are not obtainable a and second-hand locomotives are being picked up for logging o tions just as fast as they can be picked up. We have no ava supply of wire rope beyond two or three months ahead.

Senator HARDING. What is the wire rope used for—loading?

Mr. RANSOM. In connection with donkey engines, drawing logs to the railroad and in lifting the logs on the cars. It wou a very serious problem if the Government had not given the lo operations a very high preferential standing in securing supplies.

Senator HARDING. That is the Government assistance you refe preferential shipments?

Mr. RANSOM. Yes, sir. The loggers are using in their locom fuel oil which is brought in tank steamers from California, and it may seem peculiar that we do not burn wood, inasmuch as w operating in the forests, there is an economic gain in the use c and some preference should be given to the logging operator their locomotives.

I do not know what more I can add to the testimony that has given.

Senator HARDING. This is the main thing. From your know of the lumber and timber situation out there do you think tha lumber supply is adequate for any intensive program that may sonably be undertaken?

Mr. RANSOM. While loggers and lumbermen were not prepared with stocks of long logs, as soon as shipbuilding commenced they kept every shipbuilding plant supplied with lumber, and I know of my own certain knowledge that there has never been any serious complaint at any time of any shortage of material for the shipyards. Now that they have gotten them into the game and they are operating their mills for ship lumber and aeroplane stock, the production of lumber can be gradually increased until all the lumber necessary for building ships can be furnished.

Senator HARDING. And promptly?

Mr. RANSOM. Promptly.

Senator HARDING. I think that is the matter of greatest interest to us.

Senator VARDAMAN. Do you desire to say anything further?

Mr. RANSOM. That is all, sir.

Senator MCNARY. I desire to thank all of you gentlemen for coming here.

(Thereupon, at 4 o'clock p. m., the committee adjourned to meet at 2 o'clock p. m., Tuesday, March 12, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

WEDNESDAY, MARCH 13, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m. in the committee room, Capitol. Senator Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Randell, Nelson, Jones, and Harding.

The CHAIRMAN. The Senate has under consideration to-day the Agricultural appropriation bill, and a number of the members of the committee feel that they must be present in the Senate in connection with that bill, and therefore [illegible] morrow morning at 10 o'clock.

Before we adjourn [illegible] like to insert in the record:

The Southern Pine Emergency [illegible] mittee to hear [illegible] instead a written [illegible] their letter will be [illegible]

(The letter referred to [illegible]

Hon. DUNCAN U. FLETCHER,
[illegible]

MY DEAR SENATOR: [illegible] has been [illegible] gram, the lumber [illegible] appearing before [illegible] lumbermen were [illegible] appearing [illegible] ducers to [illegible] develops [illegible] schedules [illegible] more adequate [illegible] we will [illegible] but aid the [illegible]

I personally [illegible] burdened [illegible] lumbermen [illegible] now in a position [illegible] capacity [illegible]

Naturally we [illegible] of your committee [illegible] forego the hearing [illegible] unnecessary [illegible] solved. [illegible] incorporate in the record [illegible] presentation [illegible]

[illegible]

THE LARGER SIZES.

In my former testimony I referred to our letter of May 4, written at the time we agreed to accept an order for material for 50 ships on the original schedule of timbers submitted to us, and which at that time was composed of considerably smaller timbers than it was afterwards thought necessary to use. In this letter we suggested the advisability of securing some of the larger timbers from the Pacific coast, because we realized that the extraordinary demand for immediate delivery of the larger timbers on account of the fact that practically all of the ships to be built would be started at the same time and the larger timbers would be needed first and we were anxious that no act of ours might delay the production of ships, so necessary to the carrying on of our country's war program. We even went so far as to offer a reduction of 10 per cent in the price of the timbers we furnished if they would buy all of the very large sizes from the Pacific coast, where, as you know, the trees grow to larger dimensions. You are all familiar with the fact that the trees which will make the larger timbers needed in the Ferris type of boats are very scattering in our southern forests. Most of the sawmill operators of the South handle their logs with machinery and are limited to points not over 500 to 800 feet from their railroads on that account. To get these larger scattered trees necessitated the securing of many hundreds of ox or mule teams, and we feared that we could not get the equipment necessary to secure the larger timbers as fast as they were needed. The officials of the Shipping Board at that time no doubt felt that they should not adopt our suggestion that they get fir timbers from the Pacific coast on account of the congestion of the railroads and the difficulty that would be incurred in getting cars for transporting them across the country. We urged them repeatedly to take this step because we did not want anything to interfere with the rapid construction of ships.

There has been considerable newspaper publicity given the fact that the Shipping Board had found it necessary to go to the Pacific coast after these larger timbers, and the inference from these articles has been that the southern pine operators have failed to carry out their agreements. This accounts for our again bringing this matter to your attention so that your records might show just what our activities have been in reference to this very vital matter. The fact that the Shipping Board, as now constituted, has acted on the suggestion, by making fir interchangeable with southern pine, seems to me as indicative of the fact that southern lumber operators were justified in their original thought.

It is possible that we have erred in not insisting upon the different shipbuilders keeping us constantly advised of the particular sizes they would need 30 or 60 days in advance of their requirements, and we may have shipped thousands of feet of lumber in sizes that would not be needed for several months that could have been made into sizes that were going to be needed in the near future. Such information has, in very few instances, been afforded us, and in light of the fact that a number of shipyards have complained that they did not have specific sizes when needed, leads us to think that in future the shipbuilders should be more careful in giving us their hearty cooperation, by furnishing such information, and we are going to urge that they do help us in meeting the situation by keeping us constantly advised of their immediate lumber requirements. We, on our part, will use every effort to furnish promptly the sizes they need and should any operator be unable to do so on account of local conditions we will take it upon ourselves to see that the particular items needed are shipped from some other of our mills. This we could not do until recently on account of the fact that the Shipping Board did not authorize the division of partial schedules among different mills.

CHANGES IN SCHEDULE.

When I appeared before you on January 4, 1918, I mentioned the fact that there had been many changes found necessary in the sizes and workings of the timbers. At that time it was impossible for me to say just how many changes had been made. Since then we have gone over all of these changes and find that up to the present time there have been 521 changes made, nearly 48 per cent of these changes having affected the sizes. The numerous changes have delayed us materially. This statement is merely submitted as a fact to supplement my former testimony.

SHIPMENTS.

When appearing before you January 4th I made a brief statement as to the volume of our shipments, but it was impossible for me at that time to go into detail from the beginning of our shipments, as we had not had time to prepare such figures. In order that this may be shown in your records I am going to give you more detailed information by quoting the following schedule of shipments:

Total number of cars shipped.

Figures as of date—	Status of shipments.		
	In aggregate.	Number of working days.	Average per working day.
	Cars.		*Cars.*
[illegible]	1,433	[illegible]	25
[illegible]	2,444	[illegible]	34
[illegible]	1,123	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	39
[illegible]	[illegible]	[illegible]	11
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

ptember 7, when the first statement of this kind was published [illegible] ere had been shipments of 1,433 cars. The first actual [illegible] was an average of 25 cars per working day from [illegible] September [illegible]. By the n of our statement of figures as of February [illegible] you will see that we have n average since July 2 of 34 cars per [illegible] feet per day, a total of [illegible] feet. It is true that in many instances we been unable to keep the larger sizes [illegible] ts of the schedule. However, during the past [illegible] o furnish more than [illegible] and other Government uses [illegible] in charge of the lumber business of the Government [illegible] nce that it was thought more necessary [illegible] d into other channels that [illegible] are approximately [illegible] of this was required for other Government uses [illegible] the shipyards, which accounts largely [illegible] n of the larger sizes.

AVAILABLE SUPPLY OF LARGE TIMBER.

aper articles referring to the [illegible] numbers of large trees [illegible] ge percentage of these trees were [illegible] found on buildings which are [illegible] r develops that these trees were [illegible] not in the [illegible] are aware of the fact that there are [illegible] adjacent to [illegible] others [illegible] the possibility of [illegible] that the appointment of these [illegible] are going to be [illegible] of our examination [illegible]

[illegible]

[illegible] were made [illegible] have given the [illegible] and there [illegible] have [illegible] of the [illegible] the [illegible] [illegible] of the [illegible] [illegible] guess [illegible] 32. The eliminated [illegible] day on which [illegible] qualified

in January. This pledge is based upon our being allowed to use fir in the larger timbers in the event of any large demand being made on us for other Government timbers on further priority orders. In this meeting we were very generously offered every assistance possible from the great lumber interests of the Pacific coast, through Mr. Bloedell, one of the largest operators in that district, and is also lumber production officer for the Fleet Corporation on the west coast.

Respectfully,

F. L. SANFORD.

The CHAIRMAN (continuing). I have also a statement, submitted on behalf of the Southern Pine Association and the Southern Pine Emergency Bureau, addressed to the committee by Mr. L. C. Boyle, who signs himself as attorney for the industry. That statement will be inserted in the record at this point.

(The statement referred to is here printed in full, as follows:)

FOREWORD.

The Southern Pine Association is a corporation organized to sell statistical and other service of value to southern pine manufacturers, but is not operated for profit to its stockholders, its relation to the southern pine industry being that of a credit-rating organization.

The association numbers among its subscribers 215 mills, producing approximately 6,300,000,000 feet of southern pine annually, and its officers are: Charles S. Keith, president, Kansas City, Mo.; P. S. Gardiner, first vice president, Laurel, Miss.; John H. Kirby, second vice president, Houston, Tex.; J. E. Rhodes, secretary-manager, New Orleans, La.

The Southern Pine Emergency Bureau is a voluntary organization of southern pine manufacturers, without regard to their affiliation with the Southern Pine Association and was created as herein stated to facilitate the purchase and delivery of southern pine required by the United States Government for national defense. Its officers are: W. H. Sullivan, chairman, Bogalusa, La.; F. W. Stevens, vice chairman, Bagdad, Fla.; W. J. Sowers, director, New Orleans, La.

AUTHORITY FOR AND PURPOSE OF STATEMENT.

MR. CHAIRMAN AND GENTLEMEN OF THE COMMITTEE:

It will be recalled that when the shipbuilding program was under investigation Mr. F. L. Sanford, of Zona, La., a member of the Southern Pine Emergency Bureau, appeared on January 4, 1918, before your committee on behalf of the southern pine industry. At that time permission was given for the filing of a statement wherein matters of detail could be more accurately elaborated than was possible for Mr. Sanford in the brief space of time allowed him for preparation before being called as witness.

Subsequently as a result of misleading statements appearing in the public press touching an alleged failure of the southern pine producers to promptly furnish materials for ship schedules as they had agreed to do, the lumbermen were prompted to ask for a hearing before the committee and the date of the hearing was set for March 12, 1918.

Lumbermen representing approximately 20 per cent of the long-leaf southern pine production came to Washington and on March 10, 11, and 12, 1918, conferences were had among themselves and with the Shipping Board. As a result of these conferences timber requirements were readjusted and the ship schedules revised to meet conditions obtaining in the southern woods. Due to this situation it was decided by the lumbermen that they forego the hearing in order to relieve the Senate Commerce Committee of unnecessary work and primarily because it was felt that the conferences between the Shipping Board and the Southern Pine Association had brought about a solution of the entire problem.

In order, however, that the salient facts be briefly outlined in the record of the committee's investigation, a letter was drafted and submitted to the chairman of the Senate committee on March 12, over the signature of Mr. F. L. Sanford, and therein was stated our purpose of filing this brief, wherein the entire presentation might be made. It was stated in Mr. Sanford's letter, however, that the lumbermen were ready and willing to appear before the committee if the chairman or any of the members thereof desired them to do so.

ɜ sole purpose that the lumbermen have in filing this brief is to make the fact to not only the Congress of the United States but to the public at large that the ɜr industry has striven to the utmost to do its bit in connection with war prepara-
There were of necessity delays and more or less confusion touching the very problem that the Shipping Board has outlined, and, due to the newness of the ɜm, mistakes have been made both by the Government as well as the industry. ıing we want to make clear, however, is that there has not only been a fine spirit ɜsted by the lumbermen as a whole, but, indeed, they have accomplished a wonderful achievement.
ındertaking a review of the historical data that comprehend the shipbuilding there is not the slightest desire on the part of the lumbermen to appear in the le of criticizing Government agencies. Nor is it the desire or purpose of the ern Pine Association to shield any lumberman within or without its organization ndividually merits censure; but if there be such in this industry, those cases l be handled on their merits, and this that the industry as a whole be not unjustly ıp to public censure.
'ould be unwise and impracticable to undertake an analysis of all the elements ntered into the wooden-ship building program. All that we here seek to do is ng out in bas-relief certain of the outstanding and salient features, and this by f illustration of the whole wooden-ship building problem.
'ill be conducive to a more correct understanding of this problem if we start at ɜginning and briefly outline the manner in which the lumber industry came ıtact with the Government's needs.

INDUSTRY MOBILIZES WITHIN 13 DAYS AT GOVERNMENT'S REQUEST.

April 6, 1917, war was declared. On April 11 Mr. Frederick W. Allen, repre-ıg Mr. Bernard M. Baruch, chairman of the commission on raw materials, ory Council of National Defense, wired Mr. Chas. S. Keith, president of the ern Pine Association, as follows:

NEW YORK, N. Y., *April 11, 1917.*

KEITH,
'entral Coal & Coke Co., Kansas City, Mo.:

Baruch, as chairman, has asked me to serve on raw materials committee, ı is a subcommittee of Advisory Council of National Defense. One of our first ts is to get the lumber industry in South in shape for immediate action. Would ɜ willing to come on to New York and confer with us? Understand you have ng of Southern Lumber Association, St. Louis, Thursday. Would it be wise ɜ up at that meeting the general subject of lining up your members so as to ɜte immediate negotiation and supply to the Government, particularly having ınd the shipbuilding program? Please answer 43 Exchange Place, care Lee nson Co.

FREDERICK W. ALLEN.

which wire Mr. Keith replied as follows:

KANSAS CITY, MO., *April --, 1917.*

ERICK W. ALLEN,
'are Lee Higginson Co., New York City.

ır message date. I am not physically able at this time to come to New York. outhern pine industry is highly organized and will be able to mobilize it on ɜnt's notice in any way that Government wants this done. Will be glad to render ɜsistance we can. Will put subject matter of your telegram before our people in ɔuis to-morrow, and will wire you again from there. Kindly wire me there to-ıw, in care of St. Louis Club, more particulars as to what you want done.

CHAS. S. KEITH.

April 14 Mr. F. A. Eustis, agent, United States Shipping Board, wired Mr. J. E. es, secretary of the Southern Pine Association, as follows:

WASHINGTON, D. C., *April 14, 1917.*

RHODES,
'ɜretary Southern Pine Association, New Orleans, La.

lerstand southern lumbermen have increased price ship lumber $5. What is rice to Government for this material? Would it not be wise for your association n a central committee to fix price and distribute orders?

EUSTIS *Agent Shipping Board.*

On the same date, Mr. Rhodes, acting for the Southern Pine Association, wired Mr. Eustis as follows:

NEW ORLEANS, LA., *April 14, 1917.*

F. A. EUSTIS,
Special Agent, United States Shipping Board,
Washington, D. C.:

Subscribers of Southern Pine Association replying favorably to query asking if they would be willing to authorize a committee to bind them as to quantity, specifications, and delivery of lumber required by Government and to fix maximum prices of all items. Committee will be promptly appointed for this purpose and probably with authority to distribute orders. Am advised lumber prices have advanced within last three weeks account unusual domestic demand and car shortage. Will advise early regarding action of association.

SOUTHERN PINE ASSOCIATION.

Following this and on April 24, 13 days after the Government's call, Mr. Baruch's committee was advised that the southern pine operators were prepared in an organized capacity to cooperate with the Government in supplying lumber needs of every character. Mr. Rhodes's wire to this effect is as follows:

MEMPHIS, *April 24, 1917.*

FREDERICK W. ALLEN,
Committee on Raw Materials,
Munsey Building, Washington, D. C.:

Southern Pine Association appointed here to-day committee of nine, representing manufacturers, to consult with your committee relative to requirements of Government for yellow pine to fix specifications and maximum price for the same. Please wire me if possible here, care Gayoso Hotel, before 6 o'clock, when such conference may be desired and any suggestions you have to offer. I have also wired Mr. Eustis.

J. E. RHODES.

SOUNDNESS OF CENTRALIZED PURCHASING DEMONSTRATED.

The above data at least makes manifest the prompt and earnest manner in which the lumbermen sought to patriotically respond to the Government's urgent necessity. The need for this centralized effort on the part of the industry was early manifested in Mr. Eustis's wire of April 14, wherein the fact was pointed out that an advance in prices was already encountered by the Shipping Board, this being due to natural commercial conditions, which situation would have been accentuated in the future if the Government had been subjected to individual initiative rather than mobilized effort. In other words, the situation is clear that what the Government needed was cooperation among the lumbermen in supplying Government wants and this not only that the Government's requirements could be more promptly and efficiently supplied but that the price element could be more effectively controlled in the interest of the Government.

PROPOSITION SUBMITTED WITHIN 10 DAYS AFTER MOBILIZATION.

Following the urgent call of the Government for industrial mobilization the southern pine lumbermen, through the medium of the Southern Pine Association, made a quick and prompt survey of the entire lumber industry of the South, covering nine states and comprehending many thousand saw mills. The Southern Pine Association as such had within its membership 215 of the larger operations comprising approximately 40 per cent of southern pine production. However, in its desire to serve the Nation, it took into its confidence and into its council the entire lumber industry of the South, and within 10 days after its committee, at a mass meeting, was appointed was prepared to, and did submit to the Government, a detailed statement of the capacity of the southern mills and their willingness to serve, which fact is demonstrated by the committee's proposition to Mr. R. H. Downman, now lumber director of the Council of National Defense, which proposition is as follows:

LETTER OF TRANSMITTAL WITH QUOTATIONS ON SCHEDULE FOR WOODEN SHIPS

WASHINGTON, D. C., *March* [illegible]

Mr. R. H. DOWNMAN,
Chairman Special Committee on Lumber
National Council of Defense, Washington, D. C.

DEAR SIR: The undersigned members of a special committee of the Southern Pine Association, with authority to represent members of the association [illegible] have an aggregate monthly production of approximately [illegible] feet, respectfully submit for your consideration the following [illegible] for lumber required for the building of wooden ships.

The average price on this schedule is [illegible] than the present market values. We [illegible] the schedule at $55 per [illegible].

We believe that a premium [illegible] in other producing territories [illegible] larger size of timber and we would [illegible] at $55 and over be made [illegible] Government does make this specification [illegible] of the material which it can buy at the best advantage [illegible] terial on this schedule will be [illegible] opposite to each item. It is the [illegible] cent shall only apply when the [illegible] or over, is placed with us. In the event that [illegible] the remainder of the schedule will be [illegible] item shall apply.

On account of the unsettled conditions in the labor and material markets due to war conditions, drafting of men, and inflation of prices, it is recommended that this material is figured on the basis of the present cost of labor and material, and any increase at time of delivery shall be added thereto, and any reduction shall be deducted therefrom.

Due to the unsettled general conditions of labor and material, which influence cost and operations, it is respectfully urged that the quantities and dates be specifically agreed to at this time, and that any increase in the future of quantities or deliveries should be taken up as a new proposition.

These prices are predicated on the specifications that all timbers have to [illegible] and planking shall be of merchantable grade according to the special rules of the Southern Pine Association of January 1, 1917, modified with the ring rule of [illegible] of the density rule for select structural timbers in the same book of rules, except planking is to be merchantable grade [illegible]. The prices are based upon the rough size with the understanding that the surface [illegible] will be accepted, provided they measure up to the [illegible] schedules, one-fourth inch should be allowed for dressing on each [illegible]. The prices are f. o. b. point of manufacture and will be subject to grade.

SPECIAL COMMITTEE OF THE SOUTHERN PINE ASSOCIATION.

This proposition was unanimously accepted by the Committee for the government and in connection therewith he made the following [illegible]:

"We wish to thank you on behalf of the government for this proposition. We feel that this committee has conscientiously recommended this to the government as a very fair proposition as to price and [illegible] as to specifications and terms.

Further technical recommendations were made by the committee as will be observed by the following:

"RECOMMENDATIONS OF COMMITTEE REPRESENTING THE SOUTHERN PINE ASSOCIATION RELATIVE TO THE SPECIFICATIONS FOR WOODEN SHIPS.

"[Prepared by Mr. Ferris for the Emergency Shipping Board's memorandum [illegible]]

"The committee recommends that all timbers, [illegible] and planking be of merchantable grade, according to the specifications of the Southern Pine Association of January 1, 1917, modified with the ring specification and the density rule for select structural timbers in the same book of rules.

The application of the merchantable grade with the ring rule of the density specifications was acceptable for timbers, but planking should be strictly select grade.

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[1] Bonus augmented to 4,000,000,000 annually as stated in foregoing.

"The committee recommended that no yellow pine lumber be ordered except where absolutely necessary, longer than 40 feet in length, because of the comparatively small number of mills equipped to manufacture material in excess of 40 feet long."

Agreed that the specifications would be changed to eliminate all material longer than 40 feet, conditional upon labor costs, etc.[1]

"The committee recommended that lengths of items listed as shaft tunnels to and including the item of girder timbers be made 20 to 40 feet with an average length of 32 feet, instead of lengths of from 30 to 60 feet, with an average length of 45 feet."

Agreed to eliminate one-third of the longer lengths and adopt the shorter lengths where possible.

"The committee recommends that the item of 280 pieces of flitch timbers 26 inches wide be reduced in width, as it will be impossible to furnish this quantity of material of the said width, bark edges permissible."

Agreed to take 24 inches and wider.

"The committee recommends that planking specified as garboards, first streak and second streak, 46 feet long, be changed to provide for equivalent lengths."

Agreed that garboards must be 40 feet in length; first streak and second streak may be 30 to 40 feet in length, with an average of 35 feet. Planking may be 24 to 40 feet, with an average of 35 feet.

"The committee recommends that for decking 4 by 4 be substituted for 4 by 6 to finish 3¾-inch by 3¾-inch, 16-foot and up to average 26 feet, and that 3 by 3 be substituted for 3 by 4-inch, to be finished 2¾ by 2¾, to be squarge-edge stock."

The above recommendation was agreed to.

"The committee desires to call attention to the fact that the specifications are for net sizes, surfaced four sides, which will require the mills to figure on the rough or gross size sufficient to allow for dressing.

"The committee recommends that the general average of 30-foot lengths for sills and plates be changed to 24 feet."

Above recommendations agreed to.

"The committee recommends that all items in the specifications, except decking, are to be finished net dimension, slight skips in dressing four sides to be no objection."

LUMBERMEN WERE EVER PRACTICAL.

The foregoing constitutes a monument that should be very carefully examined, for it will be found that the committee representing the southern-pine industry exercised not only great caution as to its ability to fulfill Government needs, but undertook to advise the Government's representatives as to certain vital phases touching the practicability of the original schedule proposed especially as related to the forest stand in the South, for, indeed, the forest problem was and is most intimately involved in the whole situation. This committee will understand that one of the very first suggestions that occurred to these southern lumbermen related to the dimension of certain of the ship timbers needed, and it will be noted that at this early May date the committee suggested that the yellow-pine schedule should be made interchangeable with fir, thereby giving opportunity for securing larger sizes with greater certainty and facility.

In passing it is but fair to state that at this time, and as matters now stand, the Shipping Board has adopted the suggestion of the Southern Pine Emergency Bureau as made on May 3, 1917, and began on December 1, 1917, and is securing to some extent fir from the Pacific coast, and this for use interchangeably with southern pine.

Further, it may be suggested that during our conferences with the Shipping Board March 10 to 12, 1918, arrangements were made whereby southern pine operators could utilize their output to the fullest extent in the shipbuilding program, and this by reason of the fact that laminated or built-up flitches and framing timbers were arranged for. Undoubtedly there will have to be supplied from the Pacific coast certain of the larger sizes to supply some of the yards where, due to the progress of the work, single-dimension flitches or framing timbers might be necessary. This situation, however, is now ironed out so that such dimension timbers can be readily ordered from the coast and be ready when needed. As a result of this situation, the entire wooden-ship program has been facilitated and the work can and will be energetically pushed.

In making these observations it is not our thought to accentuate error on the part of anyone. This problem was new not only to the Government but to the industry. We were all treading uncharted trails and each side to the problem was doing its

[1] Many pieces, however, are still required in lengths up to 50 feet.

[illegible]

[illegible]

1.

[illegible]

ENGINEERING PHASES AGGRESSIVELY ACCOMPLISHED.

Reverting to the time element, it may be said that the months of June, July, and August of 1917 were utilized by the southern pine committee in organizing the industry, bringing into existence the Southern Pine Emergency Bureau, opening additional offices in New Orleans and Washington, and in placing Government business. Here again let it be understood that all mills, whether within or without the association had an equal opportunity to do their part. In other words, this was not a mere association program. The association was but the medium through which the industry was mobilized.

It is possible that we have erred in not insisting upon the different shipbuilders keeping us constantly advised of the particular sizes they would need 30 to 60 days in advance of their requirements and we may have shipped thousands of feet of lumber in sizes that would not be needed for several months that could have been made into sizes that were going to be needed in the near future. Such information has, in very few instances, been afforded us, but since a number of shipyards have complained that they did not have specific sizes when needed, leads us to think that in future the shipbuilders should be more careful in giving us their hearty cooperation by furnishing such information and we are going to urge that they do help us in meeting the situation by keeping us constantly advised of their immediate lumber requirements. We, on our part, will use every effort to furnish promptly the sizes they need and should any operator be unable to do so on account of local conditions, we will take it upon ourselves to see that the particular items needed are shipped from some other of our mills. This we could not do until recently on account of the fact that the Shipping Board did not authorize the division of partial schedules among different mills and further because although the Southern Pine Emergency Bureau, as such, had agreed to furnish the timber required, it was not understood or agreed that they assume the authority or responsibility therefor except in so far as it was within their power to prevail upon the mills to accept such orders.

In fairness to the Shipping Board, however, it is but just to state that in our March 10–12, 1918, conferences with Mr. Hurley, chairman of the Shipping Board, he made it clear to us that he had relied upon the emergency bureau to secure the necessary output from southern mills, hence his attitude of criticism upon our associated effort. We explained to Mr. Hurley that the bureau, as such, had no authority over individual operations, but on the contrary we had relied upon the lumber producing offices of the Fleet Corporation to keep track of and enforce production where needed, and by conference between the manager of our emergency bureau and the producing offices of the Fleet Corporation this plan had been agreed upon. As an evidence of the soundness of our position, our bureau did not keep accurate tab on the schedules production by items on each mill's output, but relied solely upon the producing officer's records. When public criticism charged southern mills with failure in furnishing ship timbers we undertook to secure data as to each operation from the producing officer of the Fleet Corporation, to the end that if blame should attach, the individual responsible for failure could be held to merited censure. We found, however, that the producing officer's records were not up to date, and we were unable to secure a detailed and careful statement of the facts. Due to this situation we are now compiling a careful tabulation of each operation, and in due course of time it is our purpose, if given permission, to file such data with this committee, and this to the end that the industry itself may not be unjustly held responsible, but, on the contrary, the individual mill producer who had in anywise slacked on the job.

Further, through the appointment of Mr. John H. Kirby, of Houston, Tex., as timber administrator of the South, the foregoing situation will not obtain in the future. We now have a definite arrangement with the Fleet Corporation, through Mr. Kirby, whereby the most accurate follow-up system will be pursued.

NUMBER OF SHIPS AND CHANGES IN THE SCHEDULES.

Soon after the mill operations started, changes in the schedules developed. In passing it is but fair to state that on February 12, 1918, the total changes numbered 521, of which 48 per cent affected the size of timbers. This was but natural, and in a measure to be expected, but let it be understood that these changes were not due to any miscarriage on the part of the lumbermen, but were purely an engineering phase of the situation.

We come now to September 29, 1917.

It will be understood that we are here addressing ourselves more particularly to the wooden-ship program as it applies to southern pine operations. In other words, we are not here discussing the activities of lumbermen on the Pacific coast, whose operations are confined to the fir wood.

The fir operators, although not confronted with the [illegible] own peculiar problems. In that great and [illegible] tions were handicapped and continually disturbed [illegible] standing this unhappy condition, the West [illegible] difficulties and in a most patriotic manner [illegible] shipbuilding problem.

The original contract with the Southern [illegible] building of but 50 wooden ships. Sub[illegible] to September, 1917, an additional 50 [illegible] en pine.

During the summer of 1917, as [illegible] made in the schedule. This [illegible] ther vital elements that had [illegible] tions. This is not stated [illegible] the difficulties under which [illegible] cious service accorded by [illegible] the Emergency Fleet Corporation [illegible] appreciated.

In September [illegible] planned for. This [illegible] southern pine [illegible] within their [illegible] their ability [illegible] designers [illegible] fitters [illegible] pine [illegible]

At [illegible] ourselves [illegible] schedule [illegible] of the extra [illegible] the element [illegible] ized. [illegible] that [illegible] southern [illegible] [illegible]

[illegible]

[illegible]

[

the attitude of the southern pine people was one of patriotic effort and was not grounded in selfish commercialism.

There has been considerable recent newspaper publicity given to the fact that the Shipping Board had found it necessary to go to the Pacific coast after these larger timbers and the inference from these articles has been that the southern pine operators failed to carry out their agreements. The fact that the Shipping Board, as now constituted, has acted on our suggestion in securing fir for certain of the larger sizes would seem to strengthen the thought that instead of criticizing the southern lumbermen on account of this situation, they should be commended for their prevision.

The specific agreement between the industry and the Government at this September meeting is as follows:

"We agree to produce and ship 100 of these additional schedules by July 30, 1918, 25 more on October 1, 1918, and the remaining 25 by January 1, 1919, though we will make every effort possible to make such deliveries sooner."

CHANGES CONSTITUTED POTENT FACTOR IN RETARDING PROGRESS.

As an item making manifest the extent of the changes that were made from the original schedules, permit the statement that the amount of timber that was to go into each of the original 50 ships was 1,123,957 feet. When the new quota was provided for in September, to wit, the 150 ships as above indicated, the quantity requirements for each ship was 1,437,215 feet b. m. Later in November (schedule No. 23) the number of feet required for each ship was changed to 1,531,410 feet b. m. The increase in footage per ship is of itself insignificant were it not for the increases in sizes represented thereby.

In so far as the designing is concerned, this was a matter entirely in the hands of the Government, and over which the industry had no control. Further, men of practical experience could have, and later did, materially aid the Government in adjusting its program to practical conditions.

These changes and extensions involved the time element. However, as it will be shown in the final analysis of this data, and the data on file within the archives of the Shipping Board, the southern lumbermen, as a whole, have, from the first to the last, fulfilled to the utmost limit every undertaking they put their name to. In other words, they have agreed to furnish the available material for these ships and will have furnished them on time, and, indeed, ahead of time in view of the finally adopted policy of fir interchange.

FLITCHES.

As already stated, it would be unwise to undertake going into all the details involved in these changes in ship schedule. We feel it proper, however, to challenge attention to two of the important items that entered into these schedules, and by a more or less detailed discussion of such items thereby illuminate the entire problem, and at the same time make manifest the fact that the lumbermen have done their full duty, within their frankly acknowledged limitations, in supplying the Government needs.

As the committee is well advised, flitches constitute the basic element in ship construction, and it is in particular reference to this phase of the problem that dimension timbers became and are important. As already indicated, the southern pine trees do not grow to the same size or height as do the fir trees on the coast. As early as May, 1917, the southern pine operators suggested that it might be wise to make the fir wood interchangeable with the southern pine in so far as the larger dimension timbers were concerned and that suggestion has been finally adopted. However, in the process of developing the ship problem, many changes in the sizes of the flitches have been made, and this of itself has necessarily handicapped and interfered with uniform production operations. It is our purpose here to generally outline the historical data touching this phase. If greater detail is required, we would be glad to furnish same as the facts are now all well in hand.

When the first 50 ship schedules were called for each contemplated 280 flitches of an average width of 26 inches, but no specified number of pieces of any one width were required, nor was any maximum width mentioned. These amounted to 58,240 feet per ship. Revisions of the schedule made since the time the southern lumbermen agreed to furnish the last 150 ships have increased the number of flitches to 570 for all ships. The new specifications required widths of 24, 26, 28, 30, 32, and 34 inches, averaging 28.55 inches, and amounting to 122,016 feet, this being an increase in width of approximately 10 per cent. The flitches for the original 50 ships amounted to 14,000 pieces. At present for 250 ships we are asked to furnish 142,800 pieces and instead of an average width of 26 inches, the average width insisted upon is 28.55 inches. To complete the 50 schedules first figured upon called for 56,197,850 feet of

lumber, while the requirements now are for 382,852,500 feet for the 250 ships, an increase of nearly 700 per cent. We feel it unnecessary to discuss the subject of changes in flitches in further detail except as follows:

The change to specified widths 24 inches and up to 34 inches made delivery [illegible] the schedules much more difficult, and it has been found necessary [illegible] the wider pieces from the Pacific coast. It develops that certain of the [illegible] pine operators, due to their timber stand, were able to furnish more than [illegible] flitches whereas other operators, due to the character of their timber stand, were unable to furnish practically any, while other operators [illegible] the Government, have actually [illegible] fulfilling their dimension quota. Whenever [illegible] furnish more than his quota, invariably [illegible] timber in furtherance of the Government [illegible] neighbor operation might not be able to [illegible] ously prosecuted in future. The effect [illegible] by the various changes on such [illegible] the bureau's ability to place orders [illegible] while we are appreciative [illegible] yet remains that the bureau [illegible] will demonstrate [illegible] Bureau has made [illegible] indeed ahead of time.

In passing it is but fair [illegible] and the Shipping Board [illegible] again be amended [illegible] more readily adapt [illegible] need for additional [illegible] laminated [illegible] or mortising [illegible] building [illegible] laminated [illegible] laminated [illegible] timber in the [illegible] weight [illegible] [illegible] a standard [illegible]

[illegible]

manifest that the lumber manufacturers were confronted with serious difficulty in adjusting themselves to Government requirements and in cooperating to the end that such requirements conform to practical possibility of fulfillment. As already stated, the problem was new to all, and each side sought as best it could to correct conditions as developments seemed to require.

SOUTHERN PINE LUMBERMEN HAVE DELIVERED.

Notwithstanding the difficulty of the situation, the southern operators actually delivered their quota of available ship material and this as fast or faster than they could be assimilated by many ship yards. It is true that there have been times when ship yards were in need of ship timber supply and which was not available. However, the failure of the mills in delivering to such yards was largely due to the car situation rather than to lack of manufactured product. There may be instances where this statement would be found unsound. However, such instances are the exception and not the rule. And in passing, it may be said that every difficulty has now been surmounted and every Government as well as private shipyard will in future be fully supplied, as the industry's machinery is now geared to supply and is supplying every possible need, particularly since the policy of securing fir for the larger sizes in the Ferris type of boat from the Pacific coast will be vigorously prosecuted and the principle of laminated flitches and framing has been adopted as part of the program.

That the committee may have before it a vivid and comprehensive showing as to what these southern mills have actually achieved in the way of ship material supply we here submit a detailed statement of car shipments.

Using as a basis the number of feet required per ship as per schedule 23 dated November 21, viz, 1,531,410 feet, gives us a total of 306,828,000 feet required for 200 ships to be delivered by July 30, 1918. Up to and including December 27, 147,196,500 feet have been shipped, or 46 per cent of the total, leaving 159,085,500 feet still to be shipped to complete the above schedules. To complete this delivery 180 working-days remain from January 1 which will require an average of 883,808 feet, or 53 cars per working-day. Shipments are now being made at the rate of from 90 to 100 cars for every working-day, far in excess of the contract requirements.

The first car was shipped on July 2, and it will be noted, from the following statements, that averaging the shipments back to that date has increased our shipments per working-day from 25 cars as of September 7 to 59 cars per working-day as of December 27, still more than sufficient, if maintained for the future and as already indicated this average has been greatly increased. Hence it is surely clear to this committee that this record of southern pine shipments combined with the adoption of the fir interchange policy, reduction in size of the flitches, and application of the laminated principle for framing timber makes manifest that there is no semblance of failure in the national wood-ship program.

Abstract of ship schedule charts of shipments.

Figures as of date	Total[1] number of cars shipped.			Figures as of date.	Total[1] number of cars[2] shipped.		
	In aggregate.	Status of shipments.			In aggregate.	Status of shipments.	
		Number of working days.	Average per working day.			Number of working days.	Average per working day
1917.	*Cars.*		*Cars.*	1917.	*Cars.*		*Cars*
Sept. 7	1,433	57	25	Nov. 29	5,965	128	47
Sept. 24	2,414	71	34	Dec. 27	8,921	151	59
Oct. 10	3,133	85	37	Jan. 18	11,691	169	68
Oct. 19	3,651	93	40	Feb. 25	16,501	201	82
Nov. 14	5,655	115	44				

[1] First car shipped July 2. [2] Average contents per car based on 4,835 cars, 16,700 feet.

The foregoing average shipments per working day constitute the mean averages since the first car was shipped.

It will be noted that on September 7, when the first statement of this kind was published by our organization, there had been shipped 1,433 cars. The first car was

shipped July 2, 1917. This shows an average of 25 cars per working day from July 2 to September 7. By the tabulation of our schedule of February 25 you will see that we have shipped an average since July 2 of 82 cars per working day, amounting to approximately 1,353,000 feet per day, a total of 277,266,500 feet. It is true that in many instances we have been unable to keep the larger sizes going into the yards in proportion to other parts of the schedule. However, during the first seven months we have been obliged to furnish more than 40,000,000 feet of 12 by 12 and larger in size for Gen. Pershing and other Government uses on priority orders. These orders were issued by those in charge of the lumber business of the Emergency Fleet Corporation and are evidence that it was thought more necessary by the Government that these sizes be turned into other channels than that they be manufactured into ship schedules. As there are approximately 100,000 feet of the large timbers in the schedule and as 40 per cent of this was required for other Government use, we were unable to deliver them to the shipyards, which accounts largely for our being behind on the correct proportion of the larger sizes.

Newspaper articles referring to the fact that logging production officers had reported enormous numbers of large trees found in the South failed to mention the fact that a very large percentage of these tracts were of cypress and that the majority of these trees are found on holdings which are not being operated as saw mill propositions. It further develops that these tracts were located along the South Atlantic coast and were not in the locality of operations of members of our organization. However, we are aware of the fact that there are a considerable number of tracts which are situated adjacent to holdings of our members and if it is possible for the logging production officers of the Emergency Fleet Corporation to arrange for us to get the larger trees out of these tracts it will greatly increase the possibility of our getting timbers for ships to be built in the future. This situation will be greatly facilitated by the passage of S. 3426, known as the Chamberlain bill, wherein is specifically lodged with the President authority to issue Executive orders commandeering timber, and which situation lumbermen, through the Southern Pine Association, heartily advocate.

THE NATION'S REPUTATION FOR ACHIEVEMENT AT STAKE.

We feel that there are two great outstanding principles involved in this investigation.

First. We need ships now, and every day accentuates the need. After the war is over we will still need ships and even more ships. In supplying this national need the wooden ship is here to stay. The time was when American bottoms carried the larger bulk of the commerce of the world. This achievement was due to the wooden ship. Can it be said that in this modern day, with our increased equipment and unexampled forest stand, we are less able to achieve as did our forebearer? We feel that we are contributing to a vital and essential factor to our country's welfare in urging continuation of the wooden-ship program and our great desire that Congress may know the exact situation to the end that the wooden-ship phase of our national problem is not discredited. 'Tis true this thought involves industrial self-interest, but in this we feel that we are serving usefully.

Of greater moment, however, is the suggestion that we in this war effort must not fail in any great enterprise. We have the mills, the forest stand, and the enterprise to build wooden ships and are now doing it, and it ought not to be recorded in history that we failed in this undertaking because of difficulties besetting the engineering phases of the problem.

The committee should have in mind the fact that when this program was started, there were but few shipyards available and there were relatively no ship workers to be employed. There was not sufficient equipment at hand. The entire problem had to be worked out from the grass roots. It naturally took time to prepare the groundwork before we could commence building wooden ships. That groundwork has now been laid, and the greatest wood shipbuilding program that the world has ever known is now under headway and is on the road to successful demonstration.

The southern pine industry has not only supplied the shipyards with ship timbers, as has been stated in detail, but in addition thereto it has supplied the Government, by way of cantonment material over a billion feet of lumber, and this in face of labor shortage, car congestion, and natural industrial difficulties incidental to war conditions. If there is one outstanding and classic achievement in this whole war situation it is that the lumber industry has, with unexampled energy, supplied the Government with marvelous rapidity its lumber and ship timber needs within the bounds of natural and practical limitations. You must have in mind the fact that an entirely new and extraordinary demand suddenly confronted this industry, and the industry rose to the occasion.

As evidence of the earnest desire of the South pine lumbermen to do their bit in fulfilling this great national need for ocean bottoms, at a meeting in Washington, March 11, 1918, members of the Southern Pine Association being present representing 20 per cent of the long leaf southern pine production, authorized the Southern Pine Association to pledge the furnishing to the Shipping Board timbers for at least 300 additional complete ship schedules annually. This pledge has been made possible and practical by the decision of the Shipping Board to build up the larger flitches and frame timbers and use two pieces of approximately even size totaling the width as required in schedule 23; reducing the size of the flitches to the maximum of 24 inches instead of 34 inches as heretofore, thus eliminating the necessity of our getting out exceedingly large pieces, the difficulty of which we have already stressed, and the increased activity on the part of the Emergency Fleet Corporation to secure as much fir as possible from the Pacific coast for the larger sizes, and in this connection at the meeting referred to, we were generously offered every possible assistance from the great lumber interests of the Pacific coast, through Mr. J. H. Bloedell, one of the largest operators in that district, who is also lumber production officer of the Emergency Fleet Corporation or the Pacific coast.

It would be instructive if this committee but knew the extraordinary effort that these lumber operators have indulged in in trying to work out this situation. The mill workers and lumber jacks were far removed from ordinary influences of war conditions. The operators distributed literature, posted great placards on the trees of the forests, and sent out speakers to educate, instruct and advise the workers of the Government's needs. Be it said in the interest of these mill laborers and timber workers that they responded splendidly to the patriotic cause and to their labor much credit is due for the achievement which has been accomplished.

THE EMERGENCY BUREAU IDEA.

One further word. When the Southern Pine Association brought into existence the Southern Pine Emergency Bureau, "to facilitate the purchase and delivery of southern pine required by the United States Government for national defense," our industrial practices were revolutionized. It will be recalled that one of the problems discussed in reference to the Webb bill was the ability of an industry to equitably distribute orders under a plan of industrial combination. In this time of national need the Souther Pine Emergency Bureau, and others following its leadership, have satisfactorily demonstrated the capacity of such an organization to distribute orders in a manner that is not only equitable and satisfactory to the producing units, but economical, efficient and to the best interests of the purchaser. This fact in itself is a contribution to the Nation's industrial future.

The world's history is being remade. Methods of industrial operation heretofore in vogue must be amended to meet the changed conditions. Things which perhaps were deemed impossible before the war have, under the lash of stern necessity, developed not only into possible but in fact necessary achievements, and this that the interest of the Commonwealth at large be most efficiently served.

In conclusion, permit this further suggestion: If fault is found with this statement it may lie in the thought that the statement might seem to undertake to absolve the lumber industry from all faults and error. This, however, is not our purpose. Undoubtedly there were mistakes and lack of grasp on the part of the operators. This would be but natural. Nor do we seek in this statement to place blame on the Shipping Board or its advisors. The one outstanding fact, however, is that we do seek to impress the thought that the industry as a whole has delivered and made good, and when the whistle blows on July 30, 1918, it will be found that every stick of timber required from the lumber mills of the Nation will be in the ships, or at least on the job; and, indeed, the industry will and has done its utmost to surmount unprecedented difficulties to secure and furnish the proportion of unusually large sizes which the Shipping Board has and may demand to complete its adopted program. Our industry has continuously met every requirement for national defense.

L. C. BOYLE,
Attorney for the Industry

The CHAIRMAN (continuing). I have also here a communication addressed to Senator Johnson from the Pacific Electric Railway Co., of Los Angeles, Cal., relative to the electric railway service between Los Angeles and the shipbuilding plants at Los Angeles Harbor (formerly San Pedro and Wilmington), furnished by that company. That letter, with its inclosures, will also be inserted in the record at this point.

WASHINGTON, *February 16, 1918.*

Hon. HIRAM W. JOHNSON,
United States Senator from California, Washington, D. C.

MY DEAR SIR: Yesterday my attention was directed to testimony given before your honorable committee on Monday, February 11, in relation to the electric railway service to and from the shipbuilding plants at San Pedro, Cal., wherein it was stated—

1. "That men live in Los Angeles, and it is a ride of fully an hour and a half or two hours for them to get to work, and the same length of time for them to get back."

2. "Many of them working on the evening shifts coming home into the city of Los Angeles at nights find the street cars have stopped, and they have probably a mile or 2 miles or more to walk from the railroad station to their homes."

3. "Cheapest rate of fare they can get is by purchasing a book of tickets for about 27 cents a day in addition to the 10-cent fare for the city street cars."

In connection with the foregoing, beg to reply on behalf of the Pacific Electric Railway Co., furnishing the service to the shipyards named, with the following facts:

(*a*) The shipyards are at Los Angeles Harbor, formerly San Pedro and Wilmington, and annexed to Los Angeles to give Los Angeles control over its harbor, the larger city being connected with the smaller ones politically by a "shoe-string" strip running southward from Los Angeles to the harbor. Country between is suburban and agricultural in nature, with a few industrial and trading centers. The passenger service between the electric railway terminal in Los Angeles and its terminal in San Pedro, 23 miles, is by interurban trains over a double-track line, with four tracks in the section immediately adjacent to Los Angeles.

The Pacific Electric Railway operates line between Los Angeles Harbor and the shipyards and Long Beach, about 7 miles distant. This is double track part of the way and single track part of the way. Arrangement is being made to materially increase the length of double track.

This service is entirely interurban in nature and is not street-car service. Cars used are high-speed interurban cars, modern, well lighted, with plush seats in the interior sections.

(*b*) Recognizing the lack of housing accommodations in the section about the shipyards and the fact that the large majority of the shipyard people must be cared for in Los Angeles and Long Beach, special service was arranged for, increasing as the number of employed at the shipbuilding plants increased. The largest number are employed at the Los Angeles Shipbuilding & Dry Dock Co., which is building 18 steel ships for the United States Government. Probably these employees on the whole do travel farther to point of employment than is the case with employees of other shipyards in the United States. On the other hand building employment in Los Angeles is not active at this time. Many of these men own their homes in Los Angeles and some own their homes in Long Beach. A check would show how many would care to move to Los Angeles Harbor if housing accommodations were provided.

(*c*) So essential is deemed the maintenance of good service that an acting assistant superintendent and junior officers are stationed at the shipbuilding yards, San Pedro, and at Long Beach, to give personal attention thereto, providing also for any special service whenever any considerable number of men shall for any reason have their work terminated for the day at an unusual hour, to make certain that necessary cars are provided for the many extras running each morning and evening, and to take care of other operating conditions that may arise. Agency has been established just outside of the shipyard for the purpose of selling tickets and giving information to employees, making it unnecessary for them to go to the regular offices.

(*d*) A daily report is made and sent the undersigned wherever I may be, showing the service rendered on that date of all shipyard trains, giving the leaving and arriving hours, number of passengers, number of passengers per car, type of cars used, and covering movements both between Los Angeles and the shipyards and Long Beach and the shipyards.

Inclosed please find such reports for January 28, 29, 30, 31, February 1, 4, 5, 6, 7, and 8, which will give fair representation. Reports for missing dates in that period have probably been sent me at New York. Should the committee so desire, will be pleased to furnish a complete set since January 1.

Please note the running time between the shipyards and Los Angeles is approximately one hour, and not an hour and a half and two hours as stated, and this time is between termini. A great many passengers get off at intermediate stops, and their time on the cars is less accordingly. Such stops number not less than 15. In addition to the special train service, regular service is operated during daylight hours every 30 minutes and at less frequent intervals up to midnight. Last train leaves shipbuilding plant for Los Angeles about 12.30 at night.

I submit that running these extra trains 22 miles, with the necessary passenger and operating stops, with average of less than sixty passengers to the car, in average time of one hour is good service.

(*e*) The book ticket fare each way is 12 cents, or between termini, is less than 6 mills per mile. This is a very low rate for interurban service. Under these and similar commutation rates thousands of people have been enabled to make their homes in the country and engage in business or employment in Los Angeles. A comparison with suburban fares elsewhere in the country will show comparatively how very low the rate is.

(*f*) Pacific Electric Railway Co., which operates the interurban system around Los Angeles, operates only a few of the street car lines in Los Angeles. The others are operated by the Los Angeles Railway, the management of which has been cooperating in taking care of the employees of the plants living in sections of the city served by that company. The following telegram from our general passenger agent as to the statement that men coming into the city at night find that the street cars have stopped, and they have to walk a mile or two miles to their homes, is self explanatory—

"Night train for Los Angeles leaves plant about 12.30 p. m.; arrives Los Angeles about 1.25. Usually carries between two hundred and fifty and three hundred. Approximately one hundred come through to station, remainder leaving train Vernon Avenue, Watts, etc. Los Angeles Railway operates service, Vernon Avenue connecting our train and connecting cars on lines crossing Vernon Avenue. Also operates cars from Los Angeles 2 o'clock into all parts of city. No complaints here of men being compelled to walk."

It is possible that statement to your committee of men having to ride an hour and a half and two hours was meant to include not only the interurban but also the street car service. Even so, I do not think many of them are an hour and a half or two hours on the road. You will note by the statements covering Long Beach service, which is much nearer the shipyards, that employees are on the road in each direction a much shorter time.

(*g*) The Pacific Electric Railway is providing extra facilities, double tracking, storage tracks, power substations, etc., to serve the shipbuilding plants at this time at cost of over $100,000.

Desire to have this statement made a matter of record with your committee, because we have pride in the interurban service given by the Pacific Electric Railway in and about Los Angeles, and special attention has been given to transportation in recognition of the vital need of our Government for ships.

I have taken the liberty of addressing this letter to you as a member of the Committee on Commerce, and as Senator from our State, and I will appreciate your courtesy in presenting the foregoing to the committee.

Yours truly,

PAUL SHOUP,
President Pacific Electric Railway Co.

CHECK OF OUTBOUND TRAVEL FOR JAN. 26, 1918, ON SAN PEDRO MAIN LINE, ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
3-1000	5.20 a. m.	6.10 a. m.	123
6-800	5.30 a. m.	6.20 a. m.	4[illegible]
6-900	5.30 a. m.	6.25 a. m.	2[illegible]
4-800	5.35 a. m.	6.35 a. m.	273
3-1000	5.40 a. m.	6.50 a. m.	139
5-800	6.20 a. m.	7.12 a. m.	255
4-900	6.30 a. m.	7.30 a. m.	258
5-900	6.35 a. m.	7.31 a. m.	248
4-800	6.35 a. m.	7.37 a. m.	161
3-800	6.51 a. m.	7.45 a. m.	140
43			2,378

Average, 55.23 passengers per car.

Long Beach-San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
1-880	5.57 a. m.	6.20 a. m.	[illegible]
2-1000	6.05 a. m.	6.30 a. m.	[illegible]
1-880	6.17 a. m.	6.47 a. m.	[illegible]
1-880	6.35 a. m.	6.55 a. m.	[illegible]
2-1000	6.52 a. m.	7.06 a. m.	[illegible]
1-880	7.17 a. m.	7.42 a. m.	[illegible]
16			[illegible]

Average, 48.06 passengers per car.

CHECK OF INBOUND TRAVEL FOR JAN. 28, 1918, ON SAN PEDRO MAIN LINE.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
1-880	3.30 p. m.	3.50 p. m.	[illegible]
1-880	3.32 p. m.	3.52 p. m.	[illegible]
2-1000	3.40 p. m.	4.10 p. m.	[illegible]
1-880	3.50 p. m.	4.20 p. m.	[illegible]
1-880	3.54 p. m.	4.17 p. m.	[illegible]
1-880	4.34 p. m.	4.54 p. m.	[illegible]
2-880	4.34 p. m.	4.54 p. m.	[illegible]
1-880	4.34 p. m.	4.53 p. m.	[illegible]
1-880	5.15 p. m.	5.35 p. m.	[illegible]
2-880	5.15 p. m.	5.32 p. m.	[illegible]
2-880	5.52 p. m.	6.10 p. m.	[illegible]
1-880	5.56 p. m.	[illegible]	[illegible]
1-880	6.10 p. m.	[illegible]	[illegible]
1-880	6.52 p. m.	[illegible]	[illegible]
48			[illegible]
2-880	12.25 a. m.	1.20 a. m.	[illegible]

Average, 39.15 passengers per car.

Long Beach-San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
7-880	3.38 p. m.	4.46 p. m.	[illegible]
2-880	4.45 p. m.	5.45 p. m.	[illegible]
8-880	4.55 p. m.	5.40 p. m.	[illegible]
2-1000	5.00 p. m.	5.50 p. m.	[illegible]
2-880	5.35 p. m.	6.20 p. m.	[illegible]
2-880	6.01 p. m.	6.45 p. m.	[illegible]
2-1000	6.40 p. m.	7.30 p. m.	[illegible]
7-880	6.50 p. m.	7.51 p. m.	[illegible]
30			1,207

Average, 43.23 passengers per car.

CHECK OF OUTBOUND TRAVEL FOR JAN. 28, 1918, ON SAN PEDRO MAIN LINE, ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
1-1000	5.20 a. m.	6.09 a. m.	221
1-880	5.30 a. m.	6.22 a. m.	374
1-880	5.30 a. m.	6.25 a. m.	262
1-880	5.35 a. m.	6.30 a. m.	404
1-880	5.40 a. m.	6.44 a. m.	270
1-880	6.20 a. m.	7.15 a. m.	367
1-880	6.30 a. m.	7.25 a. m.	120
1-880	6.35 a. m.	7.30 a. m.	314
1-880	6.35 a. m.	7.35 a. m.	121
2-1000	6.33 a. m.	7.33 a. m.	103
1-880	6.47 a. m.	7.40 a. m.	66
1-880	6.51 a. m.	7.45 a. m.	164
16			2,746

Average, 89.69 passengers per car.

Long Beach–San Pedro line.

Cars.	Left Long Beach.	Arrived San Pedro.	Pass
4-550	5.55 a. m.	6.21 a. m.	
3-1000	6.05 a. m.	6.30 a. m.	
6-550	6.15 a. m.	6.45 a. m.	
5-550	6.25 a. m.	6.56 a. m.	
2-1000	6.35 a. m.	7.00 a. m.	
4-550	7.18 a. m.	7.41 a. m.	
24			

Average, 52.41 passengers per car.

CHECK OF INBOUND TRAVEL FOR JAN. 28, 1918, ON SAN PEDRO MAIN LI

Cars.	Left San Pedro.	Arrived Los Angeles.	Pass
4-900	3.50 p. m.	5.00 p. m.	
5-900	3.55 p. m.	5.01 p. m.	
3-300	4.40 p. m.	5.32 p. m.	
4-800	4.50 p. m.	5.43 p. m.	
2-1000	4.50 p. m.	5.55 p. m.	
4-800	4.48 p. m.	5.42 p. m.	
4-800	4.55 p. m.	5.58 p. m.	
3-800	5.00 p. m.	6.05 p. m.	
4-800	5.10 p. m.	6.10 p. m.	
2-800	5.15 p. m.	6.25 p. m.	
3-800	5.35 p. m.	6.35 p. m.	
2-900	5.55 p. m.	6.43 p. m.	
4-800	6.10 p. m.	7.06 p. m.	
4-900	6.52 p. m.	7.55 p. m.	
2-900	6.53 p. m.	7.57 p. m.	
3-800	6.45 p. m.	7.38 p. m.	
53			

[1] Four-car train out of shipyards at 4.55 p. m. delayed 10 minutes between First Street, Wilm and Los Angeles, on account of following 4.50 p. m. local out of San Pedro.

Average, 49.94 passengers per car.

Long Beach–San Pedro line.

Cars.	Left San Pedro.	Arrived Long Beach.	Pass
6-550	3.56 p. m.	4.35 p. m.	
3-550	4.40 p. m.	5.23 p. m.	
5-550	4.56 p. m.	5.35 p. m.	
2-1000	5.00 p. m.	5.36 p. m.	
3-550	5.25 p. m.	6.10 p. m.	
3-550	6.01 p. m.	6.32 p. m.	
2-1000	6.40 p. m.	7.10 p. m.	
5-550	6.50 p. m.	7.20 p. m.	
29			
2-800	12.25 a. m.	1.25 a. m.	

Average, 43.86 passengers per car.

OUTBOUND TRAVEL FOR JAN. 29, 1918, ON SAN PEDRO MAIN LINE. ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
	5.20 a. m.	6.08 a. m.	193
	5.30 a. m.	6.27 a. m.	358
	5.30 a. m.	6.28 a. m.	267
	5.35 a. m.	6.35 a. m.	272
	5.40 a. m.	6.40 a. m.	319
	6.20 a. m.	7.14 a. m.	312
	6.30 a. m.	7.18 a. m.	155
	6.35 a. m.	7.20 a. m.	242
	6.35 a. m.	7.37 a. m.	177
	6.51 a. m.	7.45 a. m.	185
			2,480

91 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
	5.55 a. m.	6.21 a. m.	197
	6.10 a. m.	6.37 a. m.	226
	6.15 a. m.	6.45 a. m.	225
	6.25 a. m.	6.53 a. m.	233
	6.35 a. m.	7.00 a. m.	121
	7.23 a. m.	7.47 a. m.	147
			1,149

87 passengers per car.

OF INBOUND TRAVEL FOR JAN. 29, 1918, ON SAN PEDRO MAIN LINE.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
	3.51 p. m.	4.55 p. m.	416
	3.54 p. m.	4.56 p. m.	249
	3.56 p. m.	5.05 p. m.	283
	4.40 p. m.	5.38 p. m.	220
	4.50 p. m.	5.43 p. m.	176
	4.50 p. m.	5.53 p. m.	140
	4.57 p. m.	5.55 p. m.	188
	4.52 p. m.	5.47 p. m.	288
	5.10 p. m.	6.12 p. m.	183
	5.15 p. m.	6.14 p. m.	144
	5.35 p. m.	6.30 p. m.	138
	6.10 p. m.	7.10 p. m.	257
	6.40 p. m.	7.37 p. m.	80
	12.25 a. m.	1.20 a. m.	211
	12.30 a. m.	1.25 a. m.	31
			3,004
	12.25 a. m.	1.25 a. m.	7 (via Gardena)

70 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
5-550	3.51 p. m.	4.45 p. m.	[illegible]
5-550	3.50 p. m.	4.35 p. m.	[illegible]
2-550	4.40 p. m.	5.15 p. m.	[illegible]
2-1,000	4.54 p. m.	5.30 p. m.	[illegible]
2-550	5.00 p. m.	5.50 p. m.	[1] [illegible]
3-550	5.25 p. m.	6.13 p. m.	[illegible]
3-550	6.21 p. m.	6.56 p. m.	[illegible]
2-550	6.50 p. m.	7.25 p. m.	[illegible]
3-1,000	12.15 a. m.	12.53 a. m.	[illegible]
27			1,4[illegible]

Average, 52.33 passengers per car.

[1] Trolley break at Water Street, on Long Beach–San Pedro Line, caused delay to 5 p. m. out of San Pedro, 20 minutes.

CHECK OF OUTBOUND TRAVEL FOR JAN. 30, 1918, ON SAN PEDRO MAIN LINE ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
4-1000	5.20 a. m.	6.18 a. m.	[illegible]
6-900	5.37 a. m.	6.22 a. m.	[illegible]
6-800	5.37 a. m.	6.25 a. m.	[illegible]
5-900	5.37 a. m.	6.37 a. m.	[illegible]
5-800	5.42 a. m.	6.40 a. m.	[illegible]
4-800	6.20 a. m.	7.14 a. m.	[illegible]
4-800	6.37 a. m.	7.17 a. m.	[illegible]
4-800	6.36 a. m.	7.24 a. m.	[illegible]
4-800	6.37 a. m.	7.37 a. m.	[illegible]
3-800	6.51 a. m.	7.45 a. m.	170
45			2,4[illegible]

Average, 53.48 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
4-550	5.50 a. m.	6.18 a. m.	183
3-1000	6.05 a. m.	6.37 a. m.	[illegible]
6-550	6.15 a. m.	6.50 a. m.	[illegible]
5-550	6.25 a. m.	6.52 a. m.	[illegible]
2-1000	6.37 a. m.	7.05 a. m.	[illegible]
4-550	7.15 a. m.	7.42 a. m.	134
24			1,0[illegible]

Average, 45.50 passengers per car.

OF INBOUND TRAVEL FOR JAN. 30, 1918, ON SAN PEDRO MAIN LINE.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
	1.32 p. m.	1.38 p. m.	[illegible]
	1.32 p. m.	1.38 p. m.	[illegible]
	1.30 p. m.	1.37 p. m.	[illegible]
	1.30 p. m.	1.37 p. m.	[illegible]
	1.30 p. m.	1.38 p. m.	[illegible]
	1.30 p. m.	1.35 p. m.	[illegible]
	1.40 p. m.	1.47 p. m.	[illegible]
	1.30 p. m.	1.42 p. m.	[illegible]
	1.30 p. m.	1.40 p. m.	[illegible]
	1.40 p. m.	1.46 p. m.	[illegible]
	1.40 p. m.	1.40 p. m.	[illegible]
	1.45 p. m.	1.54 p. m.	[illegible]
	1.35 p. m.	1.28 p. m.	[illegible]
	1.35 p. m.	1.45 p. m.	[illegible]
	1.40 p. m.	1.40 p. m.	[illegible]
	[illegible]	[illegible]	[illegible]
			[illegible]

[illegible] passengers per car.

Long Beach–San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
			[illegible]

[illegible] passengers per car.

OUTBOUND TRAVEL FOR JANUARY 31, 1918, ON SAN PEDRO MAIN LINE AFTERNOON SHIPYARDS

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
	[illegible] a. m.	[illegible] a. m.	[illegible]
	[illegible] a. m.	[illegible] a. m.	[illegible]
	[illegible] a. m.	[illegible] a. m.	[illegible]
	5.35 a. m.	[illegible] a. m.	[illegible]
	[illegible] a. m.	[illegible] a. m.	[illegible]
	6.20 a. m.	[illegible] a. m.	[illegible]
	6.30 a. m.	[illegible] a. m.	[illegible]
	6.30 a. m.	7.20 a. m.	[illegible]
	6.35 a. m.	7.30 a. m.	[illegible]
	6.51 a. m.	7.45 a. m.	[illegible]
			[illegible]

.80 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
	5.50 a. m.	6.20 a. m.	[illegible]
	6.00 a. m.	6.40 a. m.	[illegible]
	6.15 a. m.	6.45 a. m.	[illegible]
	6.25 a. m.	6.55 a. m.	[illegible]
	6.40 a. m.	6.50 a. m.	[illegible]
	7.10 a. m.	7.40 a. m.	[illegible]
			1,010

.38 passengers per car.

CHECK OF INBOUND TRAVEL FOR JANUARY 31, 1918, ON SAN PEDRO MAIN LINE.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
6- 900	3.50 p. m.	4.46 p. m.	[illegible]
6- 800	3.55 p. m.	5.00 p. m.	[illegible]
5- 900	3.55 p. m.	5.04 p. m.	[illegible]
4- 800	4.20 p. m.	5.12 p. m.	[illegible]
1- 800	4.20 p. m.	5.20 p. m.	[illegible]
3-1000	4.40 p. m.	5.32 p. m.	[illegible]
4- 800	4.40 p. m.	5.45 p. m.	[illegible]
2- 800	4.50 p. m.	5.54 p. m.	[illegible]
5- 800	4.52 p. m.	5.51 p. m.	[illegible]
1- 800	5.00 p. m.	5.56 p. m.	114
3- 800	5.10 p. m.	6.06 p. m.	[illegible]
2- 800	5.15 p. m.	6.18 p. m.	[illegible]
2- 800	5.35 p. m.	6.32 p. m.	[illegible]
4- 800	6.10 p. m.	7.06 p. m.	[illegible]
3- 800	6.40 p. m.	7.40 p. m.	[illegible]
6- 800	12.30 a. m.	1.30 a. m.	[illegible]
37			[illegible]

Average 50.15 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
6- 550	3.52 p. m.	5.35 p. m.	[illegible]
5- 550	3.54 p. m.	5.36 p. m.	[illegible]
2- 550	4.35 p. m.	5.15 p. m.	[illegible]
2- 800	4.51 p. m.	5.30 p. m.	[illegible]
2- 800	4.55 p. m.	5.31 p. m.	[illegible]
2- 550	5.17 p. m.	5.58 p. m.	[illegible]
3- 550	5.55 p. m.	6.40 p. m.	[illegible]
3-1000	12.10 a. m.	1.05 a. m.	[illegible]
26			1

Average, 49.05 passengers per car.

CHECK OF OUTBOUND TRAVEL FOR FEB. 1, 1918, ON SAN PEDRO MAIN LINE ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
4-1000	5.20 a. m.	6.07 a. m.	
6-900	5.30 a. m.	6.22 a. m.	
6-800	5.30 a. m.	6.30 a. m.	
6-800	5.35 a. m.	6.40 a. m.	
4-800	5.40 a. m.	6.47 a. m.	
3-800	6.15 a. m.	7.05 a. m.	
4-800	6.28 a. m.	7.25 a. m.	
5-900	6.30 a. m.	7.26 a. m.	
3-800	6.35 a. m.	7.36 a. m.	
3-1000	6.51 a. m.	7.45 a. m.	
44			2, [illegible]

Average, 53.06 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
4-550	5.50 a. m.	6.18 a. m.	[illegible]
3-1000	6.05 a. m.	6.37 a. m.	[illegible]
6-550	6.15 a. m.	6.50 a. m.	[illegible]
5-550	6.20 a. m.	6.55 a. m.	[illegible]
2-1000	6.30 a. m.	7.05 a. m.	[illegible]
4-550	7.15 a. m.	7.40 a. m.	[illegible]
24			[illegible]

Average, 40.54 passengers per car.

OF INBOUND TRAVEL FOR FEB. 1, 1918, ON SAN PEDRO MAIN LINE.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
	3.53 p. m.	4.52 p. m.	353
	3.55 p. m.	5.10 p. m.	346
	3.56 p. m.	5.12 p. m.	196
	4.40 p. m.	5.43 p. m.	244
	4.41 p. m.	5.45 p. m.	71
	4.20 p. m.	5.16 p. m.	200
	4.50 p. m.	5.55 p. m.	169
	4.50 p. m.	5.58 p. m.	68
	5.10 p. m.	6.10 p. m.	134
	4.50 p. m.	5.48 p. m.	261
	5.00 p. m.	6.00 p. m.	46
	5.35 p. m.	6.30 p. m.	131
	6.10 p. m.	7.05 p. m.	174
	5.15 p. m.	6.17 p. m.	73
	12.25 a. m.	1.25 a. m.	290
	12.25 a. m.	1.30 a. m.	[1] 16
			2,772

[1] Via Torrance.

1.33 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
	3.55 p. m.	4.33 p. m.	299
	3.57 p. m.	4.40 p. m.	248
	4.35 p. m.	5.18 p. m.	166
	4.53 p. m.	5.32 p. m.	101
	4.55 p. m.	5.30 p. m.	80
	5.25 p. m.	6.03 p. m.	123
	6.01 p. m.	6.45 p. m.	113
	12.10 a. m.	12.58 a. m.	129
			1,259

3.31 passengers per car.

OUTBOUND TRAVEL FOR FEB. 4, 1918, ON SAN PEDRO MAIN LINE ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
	5.20 a. m.	6.05 a. m.	213
	5.30 a. m.	6.25 a. m.	215
	5.30 a. m.	6.32 a. m.	312
	5.35 a. m.	6.45 a. m.	197
	5.40 a. m.	6.45 a. m.	214
	6.20 a. m.	7.10 a. m.	218
	6.30 a. m.	7.22 a. m.	150
	6.30 a. m.	7.26 a. m.	318
	6.35 a. m.	7.30 a. m.	162
	6.51 a. m.	7.48 a. m.	237
			2,236

.27 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers
4- 550	5.50 a. m.	6.25 a. m.	[illegible]
3-1000	6.05 a. m.	6.30 a. m.	[illegible]
6- 550	6.15 a. m.	6.43 a. m.	[illegible]
5- 550	6.25 a. m.	6.55 a. m.	[illegible]
1-1000	6.70 a. m.	7.05 a. m.	
4- 550	7.20 a. m.	7.49 a. m.	[illegible]
1-1000	7.10 a. m.	7.40 a. m.	
24			[illegible]

Average 46.50 passengers per car.

CHECK OF INBOUND TRAVEL FOR FEB. 4, 1918, ON SAN PEDRO MAIN LINE.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers
6- 900	3.50 p. m.	4.50 p. m.	[illegible]
6- 900	3.53 p. m.	4.55 p. m.	[illegible]
4- 800	3.50 p. m.	5.00 p. m.	[illegible]
5- 800	4.00 p. m.	5.10 p. m.	[1] [illegible]
4- 800	4.20 p. m.	5.33 p. m.	[illegible]
3- 800	4.40 p. m.	5.40 p. m.	[illegible]
5- 800	4.53 p. m.	5.57 p. m.	[illegible]
2- 800	4.56 p. m.	5.50 p. m.	[illegible]
4-1000	4.50 p. m.	5.55 p. m.	[illegible]
2- 800	5.18 p. m.	6.23 p. m.	[illegible]
3- 800	5.15 p. m.	6.13 p. m.	[illegible]
2- 800	5.35 p. m.	6.44 p. m.	[illegible]
4- 800	6.10 p. m.	7.10 p. m.	[illegible]
3- 800	6.47 p. m.	8.00 p. m.	[2] [illegible]
6- 800	12.25 a. m.	1.25 a. m.	[illegible]
1- 800	12.25 a. m.	1.30 a. m.	[3] [illegible]
60			[illegible]

[1] 4.00 p. m. delayed account of accident.
[2] 6.47 p. m. delayed account B. O. motor on car 900.
[3] Via Torrance.

Average 52.80 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
6- 550	3.50 p. m.	4.30 p. m.	[illegible]
4- 550	3.55 p. m.	4.35 p. m.	[illegible]
2- 550	3.58 p. m.	4.37 p. m.	[illegible]
3- 550	4.35 p. m.	5.18 p. m.	[illegible]
3- 550	4.55 p. m.	5.35 p. m.	[illegible]
3- 550	5.28 p. m.	6.08 p. m.	[illegible]
3- 550	6.45 p. m.	7.25 p. m.	[illegible]
3-1000	12.28 a. m.	1.05 a. m.	[illegible]
28			[illegible]

Average 43.11 passengers per car.

OF OUTBOUND TRAVEL FOR FEB. 5, 1918, ON SAN PEDRO MAIN LINE, ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
	5.30 a. m.	6.20 a. m.	[illegible]
	5.30 a. m.	6.27 a. m.	[illegible]
	5.30 a. m.	6.45 a. m.	[illegible]
	5.35 a. m.	6.45 a. m.	[illegible]
	5.40 a. m.	6.30 a. m.	[illegible]
	6.20 a. m.	7.26 a. m.	[illegible]
	6.20 a. m.	7.35 a. m.	[illegible]
	6.35 a. m.	7.40 a. m.	172
	6.51 a. m.	7.46 a. m.	152
			2,331

Ferry.

8.28 passengers per car.

Long Beach—San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
	5.50 a. m.	6.15 a. m.	141
	6.05 a. m.	6.24 a. m.	179
	6.15 a. m.	6.53 a. m.	276
	6.25 a. m.	6.55 a. m.	207
	6.30 a. m.	7.00 a. m.	92
	7.10 a. m.	7.34 a. m.	163
	7.10 a. m.	7.40 a. m.	79
			1,161

0.04 passengers per car.

OF INBOUND TRAVEL FOR FEB. 5, 1918, ON SAN PEDRO MAIN LINE, ACCOUNT SHIPYARDS.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
	3.50 p. m.	4.59 p. m.	370
	3.53 p. m.	5.05 p. m.	281
	3.50 p. m.	5.03 p. m.	250
	4.00 p. m.	5.10 p. m.	246
	4.20 p. m.	5.18 p. m.	219
	4.50 p. m.	5.51 p. m.	283
	4.45 p. m.	5.40 p. m.	223
	4.50 p. m.	6.00 p. m.	123
	4.50 p. m.	5.48 p. m.	274
	5.15 p. m.	6.08 p. m.	217
	5.15 p. m.	6.20 p. m.	90
	6.19 p. m.	7.23 p. m.	288
	6.40 p. m.	7.38 p. m.	105
	12.25 a. m.	1.30 a. m.	301
	12.25 a. m.	1.30 a. m.	[1] 17
			3,193

[1] Via Torrance.

9.87 passengers per car.

Long Beach-San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Pass
6- 550	3.52 p. m.	4.33 p. m.	
5- 550	3.55 p. m.	4.36 p. m.	
3- 550	3.55 p. m.	4.25 p. m.	
3- 550	4.35 p. m.	5.16 p. m.	
2- 550	4.55 p. m.	5.33 p. m.	
2- 550	4.50 p. m.	5.34 p. m.	
3- 550	5.17 p. m.	5.55 p. m.	
3- 550	5.55 p. m.	6.25 p. m.	
3-1000	12.10 a. m.	1.10 a. m.	
30			

Average, 45.7 passengers per car.

CHECK OF OUTBOUND TRAVEL FOR FEB. 6, 1918, ON SAN PEDRO MAIN L
ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Pass
3-1000	5.20 a. m.	6.15 a. m.	
6-900	5.30 a. m.	6.25 a. m.	
5-800	5.30 a. m.	6.20 a. m.	
5-800	5.35 a. m.	6.34 a. m.	
4-800	5.40 a. m.	6.50 a. m.	
6-900	6.30 a. m.	7.30 a. m.	
5-800	6.30 a. m.	7.30 a. m.	
3-800	6.35 a. m.	7.36 a. m.	
3-1000	6.51 a. m.	7.48 a. m.	
40			

Average 59.17 passengers per car.

Long Beach-San Pedro line.

Cars.	Left Long Beach.	Arrived San Pedro.	Pass
3-500	5.50 a. m.	6.18 a. m.	
4-500	6.05 a. m.	6.42 a. m.	
6-500	6.15 a. m.	6.41 a. m.	
5-500	6.25 a. m.	6.52 a. m.	
1-1000	6.30 a. m.	7.10 a. m.	
3-500	7.15 a. m.	7.42 a. m.	
1-1000	7.10 a. m.	7.42 a. m.	
23			

Average 47.96 passengers per car.

[illegible] OF OUTBOUND TRAVEL FOR FEB. [illegible], 1915, ON SAN PEDRO MAIN LINE.

Cars.	Left Los Angeles	Arrival San Pedro	Passengers
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible] 46. [illegible] 1.31 [illegible]

[illegible] passengers per car.

[illegible] SAN PEDRO [illegible]

Cars.	Left San Pedro	Arrival [illegible]	Passengers
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible] 1,[illegible]

[illegible]ort account; phones [illegible].
[illegible] 40.03 passengers per car.

OF OUTBOUND TRAVEL ON SAN PEDRO MAIN LINE FOR FEB. [illegible], 1915, [illegible] SHIPYARDS.

Cars.	Left Los Angeles	Arrival San Pedro	Passengers
[illegible]	5.20 a. m.	6.11 a. m.	[illegible]
[illegible]	5.28 a. m.	6.30 a. m.	[illegible]
[illegible]	5.30 a. m.	6.30 a. m.	[illegible]
[illegible]	5.35 a. m.	6.35 a. m.	[illegible]
[illegible]	5.40 a. m.	6.55 a. m.	[illegible]
[illegible]	6.30 a. m.	7.40 a. m.	[illegible]
[illegible]	6.30 a. m.	7.32 a. m.	[illegible]
[illegible]	6.35 a. m.	7.45 a. m.	[illegible]
[illegible]	6.38 a. m.	7.55 a. m.	[illegible]
[illegible]			[illegible]

[illegible], 55.61 passengers per car.

Long Beach-San Pedro line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
3-500	5.50 a. m.	6.19 a. m.	147
4-500	6.05 a. m.	6.32 a. m.	204
5-500	6.15 a. m.	6.50 a. m.	222
5-500	6.25 a. m.	6.50 a. m.	227
1-1000	6.30 a. m.	6.54 a. m.	65
3-500	7.10 a. m.	7.47 a. m.	127
1-1000	7.10 a. m.	7.58 a. m.	70
22			1,072

Average, 48.71 passengers per car.

CHECK OF INBOUND TRAVEL ON SAN PEDRO MAIN LINE FOR FEB. 7, 1918.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
6-900	3.55 p. m.	4.48 p. m.	264
6-900	3.56 p. m.	5.05 p. m.	252
4-800	3.50 p. m.	4.53 p. m.	267
3-800	4.00 p. m.	5.10 p. m.	228
4-800	4.20 p. m.	5.15 p. m.	193
1-800	4.20 p. m.	5.30 p. m.	51
3-1000	4.40 p. m.	5.55 p. m.	215
4-800	4.50 p. m.	5.57 p. m.	279
2-800	4.50 p. m.	6.01 p. m.	144
5-800	4.50 p. m.	6.00 p. m.	276
3-800	5.15 p. m.	6.10 p. m.	157
2-800	5.15 p. m.	6.15 p. m.	108
3-800	5.15 p. m.	6.10 p. m.	157
2-800	5.35 p. m.	6.32 p. m.	121
4-800	6.10 p. m.	7.19 p. m.	216
2-800	6.48 p. m.	7.47 p. m.	138
6-800	12.27 a. m.	1.30 a. m.	280
1-800	12.25 a. m.	1.30 a. m.	[1] 32
61			3,503

[1] Via Torrance.

Average, 57.42 passengers per car.

Long Beach-San Pedro line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
6-550	3.50 p. m.	4.33 p. m.	329
5-550	3.55 p. m.	4.39 p. m.	237
3-550	3.55 p. m.	4.30 p. m.	75
3-550	4.35 p. m.	5.07 p. m.	154
2-1000	4.50 p. m.	5.29 p. m.	83
2-550	4.55 p. m.	5.29 p. m.	86
3-550	5.22 p. m.	6.02 p. m.	119
3-550	5.55 p. m.	6.30 p. m.	137
3-550	6.40 p. m.	7.20 p. m.	94
3-1000	12.10 a. m.	1.08 a. m.	159
33			1,473

Average, 44.64 passengers per car.

Trains leaving shipyard 3.50 p. m. had slight delay between San Pedro and Dominguez Junction account of weak power. Were delayed between Dominguez Junction and Watts by Coast Line freight, but not very much.

The 4.45 p. m. trains received 10 to 15 minutes delay between Dominguez Junction and Watts by steamer merchandise freight motor 1602.

CHECK OF OUTBOUND TRAVEL FOR FEB. 8, 1918, ON SAN PEDRO MAIN LINE ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
[illegible]-1000	5.20 a. m.	6.05 a. m.	138
[illegible]-800	5.25 a. m.	6.25 a. m.	278
[illegible]-900	5.30 a. m.	6.23 a. m.	365
[illegible]-900	5.35 a. m.	6.45 a. m.	357
[illegible]-900	5.40 a. m.	6.55 a. m.	193
[illegible]-900	6.30 a. m.	7.20 a. m.	337
[illegible]-900	6.30 a. m.	7.20 a. m.	240
[illegible]-900	6.35 a. m.	7.30 a. m.	209
[illegible]-1000	6.51 a. m.	7.45 a. m.	202
[illegible]			2,319

Average, 57.73 passengers per car.

Long Beach-San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
[illegible]—800	5.50 a. m.	6.15 a. m.	131
[illegible]—800	6.05 a. m.	6.30 a. m.	171
[illegible]—800	6.15 a. m.	6.42 a. m.	258
[illegible]—800	6.25 a. m.	6.57 a. m.	227
[illegible]—1000	6.30 a. m.	7.00 a. m.	84
[illegible]—800	7.10 a. m.	7.33 a. m.	129
[illegible]—1000	7.10 a. m.	7.40 a. m.	66
[illegible]			1,066

Average, 46.35 passengers per car.

CHECK OF INBOUND TRAVEL FOR FEB. 8, 1918, ON SAN PEDRO MAIN LINE.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
[illegible]-800	3.50 p. m.	4.50 p. m.	372
[illegible]-800	3.54 p. m.	4.53 p. m.	302
[illegible]-800	3.56 p. m.	5.04 p. m.	234
[illegible]-800	3.50 p. m.	5.03 p. m.	246
[illegible]-800	4.20 p. m.	5.14 p. m.	179
[illegible]-800	4.20 p. m.	5.20 p. m.	33
[illegible]-1000	4.40 p. m.	5.39 p. m.	235
[illegible]-800	4.50 p. m.	5.47 p. m.	176
[illegible]-800	4.52 p. m.	5.49 p. m.	278
[illegible]-800	4.50 p. m.	5.55 p. m.	179
[illegible]-800	5.15 p. m.	6.12 p. m.	101
[illegible]-800	5.15 p. m.	6.10 p. m.	126
[illegible]-800	5.35 p. m.	6.32 p. m.	102
[illegible]-800	6.20 p. m.	7.24 p. m.	208
[illegible]-800	6.40 p. m.	7.36 p. m.	111
[illegible]-800	12.25 a. m.	1.20 a. m.	287
[illegible]-800	12.25 a. m.	1.20 a. m.	[1] 32
[illegible]			3,201

[1] Via Torrance.

Average, 55.18 passengers per car.

Long Beach-San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Pass
6-550	3.50 p. m.	4.28 p. m.	
5-550	3.55 p. m.	4.40 p. m.	
3-550	3.55 p. m.	4.30 p. m.	
3-550	4.35 p. m.	5.17 p. m.	
2-900	4.55 p. m.	5.28 p. m.	
2-550	4.55 p. m.	5.30 p. m.	
3-550	5.18 p. m.	5.55 p. m.	
3-550	5.55 p. m.	6.33 p. m.	
3-550	6.35 p. m.	7.08 p. m.	
3-1000	12.23 a. m.	1.00 a. m.	
33			

[1] This train delayed 10 minutes on account of train breaking in two at Third and Riverside (j coupled).

Average, 44.8 passengers per car.

(Thereupon, at 2.05 p. m., the committee adjourned to me 10 o'clock a. m., Thursday, March 14, 1918).

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

THURSDAY, MARCH 14, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 10 o'clock a. m., in the committee room, Capitol, Hon. Duncan U. Fletcher, presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Reed, Nelson, Jones, Harding, Calder, and Johnson.

The CHAIRMAN. The committee will come to order, and we will hear Mr. Kennedy.

STATEMENT OF MR. DUDLEY REED KENNEDY, MANAGER OF INDUSTRIAL RELATIONS DEPARTMENT, AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION.

The CHAIRMAN. Mr. Kennedy, please state your name and place of residence.

Mr. KENNEDY. My name is Dudley Reed Kennedy. I was born and have lived all my life at Youngstown, Ohio. I am 33 years of age.

The CHAIRMAN. What is your present occupation and business?

Mr. KENNEDY. I am manager of the industrial relations department of the American International Shipbuilding Corporation. I am an industrial engineer.

The CHAIRMAN. How long have you been engaged in that?

Mr. KENNEDY. In that work?

The CHAIRMAN. Yes.

Mr. KENNEDY. About eight or nine years.

The CHAIRMAN. How long have you been with this corporation?

Mr. KENNEDY. Since the last of October, 1917.

Senator NELSON. You used there an expression that is new to me, "industrial engineer." What does that imply?

Mr. KENNEDY. Well, that is a new profession, Senator. An industrial engineer, as I define it, is a man who has made a practical study of labor problems, all of the problems of labor, and who interprets to capital or the employer, in terms that they understand, the aims, ambitions, desires, and hopes of labor.

Senator NELSON. Do you call that engineering work?

Mr. KENNEDY. That is industrial engineering, as I define it; yes, sir.

Senator RANSDELL. Will you kindly tell us, Mr. Kennedy, the character of the work you were engaged in before you took employment with the American International Shipbuilding Corporation?

Mr. KENNEDY. I should like to give you a little history of my experience, Senator. I was born, as I have said, at Youngstown, Ohio, attended the public schools and the high schools there, and graduated from the law department of the University of Michigan. During the time I was in high school and in college I helped to work my way through college by working in the steel plants and rolling mills at Youngstown, which is a large steel center. The first work I ever did was at common labor in the old American Bridge Co. plant there, at $1.35 a day of 12 hours. It is rather an odd coincidence that $1.35 for 12 hours was the wage then, whereas now we are paying for one trade in the shipbuilding program $1.35 per hour.

During all of the summers of the years that I was in high school and college I worked in these mills at different things—common labor and other work. I was admitted to the bar in Ohio and practiced law there. I was in general practice for three or four years, but I was very much interested in social science, political economy, and the allied sciences, and my working in the mills had given me some insight into labor. That was, if you remember, at the stage when large numbers of men were being taken on and large expansions were taking place in business all over the country, and the labor problem was becoming recognized as a problem at that time. I had been studying it, I had studied political economy in college—had specialized a little on that—and had decided that when the proper opportunity afforded itself I should like to get into this question as a life work.

In 1911 the first workmen's compensation law was passed in Ohio, one of the first in the United States. I was on the commission that helped to draft that law. I might say, briefly, not to take up too much time, that Ohio, as you all know, has been one of the most progressive States in the Union in the passing of legislation for the benefit of the worker. I have served on every State commission that has been appointed in Ohio since that time, covering, first, the workmen's compensation law; the commission appointed the next year to recommend changes in the law; the commission a year or so after that to fix safety standards for the workers in the State, which commission is still in being; the commission appointed last year to study social insurance, somewhat like the California commission on the question of health insurance, sickness prevention, and old-age insurance. That I am still a member of. All of this, of course, was without any salary.

I was elected last year secretary of the iron and steel section of the National Safety Council, and the United States Department of Labor is now using as a basis for computation of its accident statistics a formula that I got up in 1913. So I have done nothing else but that sort of work.

I was with the Youngstown Sheet & Tube Co., at Youngstown, which is the third or fourth largest independent steel plant in the United States, as manager of industrial relations, and I was with them all of this time except 18 months, when I held the same position with the B. F. Goodrich Co., at Akron, Ohio, the largest rubber factory in the world, employing nearly 20,000 men. All that time I have had charge of the departments which had to do with industrial relations work, including employment, housing, transportation of the workers, the matter of their wages, conditions, hours, and feeding

where we house men on the property, and all of the relations as between the employer and the employee, representing the employees' side of the case.

The CHAIRMAN. You have had charge of that work in connection with this shipbuilding plant at Hog Island?

Mr. KENNEDY. I have; yes, sir.

Senator NELSON. Are you on the pay roll of the Government?

Mr. KENNEDY. I am; yes, sir.

Senator NELSON. You are employed by the Government?

Mr. KENNEDY. I am.

Senator NELSON. What is your salary?

Mr. KENNEDY. $12,000 a year.

Senator NELSON. As an industrial engineer, engaged in the work you have referred to?

Mr. KENNEDY. Yes, sir.

The last large particular work I had at Youngstown was the drawing of the housing program, a purely private proposition for the housing of their employees, involving about $5,000,000, to complete three separate town sites, and the building of homes to rent and to sell at cost to employees. With that I had all these other matters that I speak of—employment, safety, welfare, housing, and all these other things.

In October I was approached by a representative of the American International Shipbuilding Corporation, who explained to me somewhat in detail the problems that presented themselves to the Government in its proposition at Hog Island. From a purely scientific standpoint, from a professional standpoint, I was very much interested, because it presented the largest problem in that line that had ever been presented to any man, and it was a wonderful opportunity professionally, I thought, for a young man; and although it involved a distinct sacrifice on my part financially, I felt that the opportunity and the experience to be gained was commensurate with the moving of my home, and one thing and another, and so I came to Philadelphia.

In studying these things over a number of years I had not only read all there was to be read about what had been done, but in my work on these commissions in Ohio it had been necessary to study all that had been done in the matter in Germany, Austria-Hungary, France, England, and all of the European countries that had advanced legislation for the benefit of the worker. In addition to that I have personally visited practically every large manufacturing plant doing any industrial relations work east of the Mississippi River, as far north as Boston, at the United Shoe Machinery Co., and as far south as Alabama. When I came down here it was with the express understanding that I was to carry out for the Government, through its agent, all of the practical things that had been done by the best plants in the United States ——

Senator NELSON. Who first employed you to come down here?

Mr. KENNEDY. The American International Shipbuilding Corporation, as agent for the Government. That is the way they explained it to me and as I have understood it ever since, that they are simply an arm of the Government. I came down here to take up this work with that understanding in view, that they wanted to make conditions there just as good as it was possible to make them for the worker. I knew when I came—and I should have found out quickly if I had

ING BOARD EMERGENCY FLEET CORPORATION.

Long Beach–San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passenger
4- 550	5.50 a. m.	6.25 a. m.	1
3-1000	6.05 a. m.	6.30 a. m.	1
6- 550	6.15 a. m.	6.43 a. m.	2
5- 550	6.25 a. m.	6.55 a. m.	2
1-1000	6.30 a. m.	7.05 a. m.	
4- 550	7.20 a. m.	7.49 a. m.	3
1-1000	7.10 a. m.	7.40 a. m.	
24			1,[illegible]

Average 46.50 passengers per car.

CHECK OF INBOUND TRAVEL FOR FEB. 4, 1918, ON SAN PEDRO MAIN LINE.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passenger
6- 900	3.50 p. m.	4.50 p. m.	392
6- 900	3.53 p. m.	4.55 p. m.	317
4- 800	3.50 p. m.	5.00 p. m.	215
5- 800	4.00 p. m.	5.10 p. m.	[1] 303
4- 800	4.20 p. m.	5.33 p. m.	221
3- 800	4.40 p. m.	5.40 p. m.	161
5- 800	4.53 p. m.	5.57 p. m.	291
2- 800	4.56 p. m.	5.50 p. m.	83
4-1000	4.50 p. m.	5.55 p. m.	254
2- 800	5.18 p. m.	6.23 p. m.	121
3- 800	5.15 p. m.	6.13 p. m.	123
2- 800	5.35 p. m.	6.44 p. m.	130
4- 800	6.10 p. m.	7.10 p. m.	151
3- 800	6.47 p. m.	8.00 p. m.	[2] 172
6- 800	12.25 a. m.	1.25 a. m.	296
1- 800	12.25 a. m.	1.30 a. m.	[3] 13
60			3,109

[1] 4.00 p. m. delayed account of accident.
[2] 6.47 p. m. delayed account B. O. motor on car 900.
[3] Via Torrance.

Average 52.80 passengers per car.

Long Beach–San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
6- 550	3.50 p. m.	4.30 p. m.	[illegible]
4- 550	3.55 p. m.	4.35 p. m.	[illegible]
2- 550	3.58 p. m.	4.37 p. m.	[illegible]
3- 550	4.35 p. m.	5.18 p. m.	[illegible]
2- 550	4.55 p. m.	5.35 p. m.	[illegible]
3- 550	5.28 p. m.	6.08 p. m.	[illegible]
3- 550	6.45 p. m.	7.25 p. m.	[illegible]
3-1000	12.28 a. m.	1.05 a. m.	[illegible]
28			1,[illegible]

Average 43.11 passengers per car.

F OUTBOUND TRAVEL FOR FEB. 5, 1918, ON SAN PEDRO MAIN LINE, ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
.....	5.20 a. m....	6.20 a. m....	213
.....	5.30 a. m....	6.27 a. m....	380
.....	5.30 a. m....	6.45 a. m....	202
.....	5.35 a. m....	6.45 a. m....	395
.....	5.40 a. m....	6.50 a. m....	196
.....	6.30 a. m....	7.26 a. m....	[1] 327
.....	6.30 a. m....	7.25 a. m....	296
.....	6.35 a. m....	7.40 a. m....	172
.....	6.51 a. m....	7.48 a. m....	151
.....	.....	.....	2,331

[1] Foggy.

,28 passengers per car.

Long Beach—San Pedro Line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
.....	5.50 a. m....	6 18 a. m....	141
.....	6.05 a. m....	6.24 a. m....	109
.....	6.15 a. m....	6.53 a. m....	276
.....	6.25 a. m....	6.55 a. m....	207
.....	6.30 a. m....	7.00 a. m....	92
.....	7.10 a. m....	7.34 a. m....	163
.....	7.10 a. m....	7.40 a. m....	79
.....	.....	.....	1,101

),04 passengers per car.

F INBOUND TRAVEL FOR FEB. 5, 1918, ON SAN PEDRO MAIN LINE, ACCOUNT SHIPYARDS.

Cars.	Left San Pedro.	Arrived Los Angeles.	Passengers.
.....	3.50 p. m....	4.59 p. m....	370
.....	3.53 p. m....	5.05 p. m....	281
.....	3.50 p. m....	5.03 p. m....	250
.....	4.00 p m....	5.10 p. m....	246
.....	4.20 p. m....	5.18 p. m....	219
.....	4.50 p. m....	5.51 p. m....	283
.....	4.45 p. m....	5.40 p. m....	223
.....	4.50 p. m....	6.00 p. m....	125
.....	4.50 p. m....	5.48 p. m....	274
.....	5.15 p. m....	6.08 p. m....	217
.....	5.15 p. m....	6.20 p. m....	96
.....	6.19 p. m....	7.23 p. m....	286
.....	6.40 p. m....	7.38 p. m....	105
.....	12.25 a. m...	1.30 a. m....	301
.....	12.25 a. m...	1.30 a. m....	[1] 17
.....	.....	.....	3,293

[1] Via Torrance.

,87 passengers per car.

Long Beach-San Pedro Line.

Cars.	Left San Pedro.	Arrived Long Beach.	Passengers.
6- 550	3.52 p. m.	4.33 p. m.	[illegible]
5- 550	3.55 p. m.	4.36 p. m.	[illegible]
3- 550	3.55 p. m.	4.35 p. m.	[illegible]
2- 550	4.35 p. m.	5.16 p. m.	[illegible]
2- 550	4.55 p. m.	5.23 p. m.	[illegible]
2- 550	4.50 p. m.	5.34 p. m.	[illegible]
3- 550	5.17 p. m.	5.55 p. m.	[illegible]
3- 550	5.55 p. m.	6.25 p. m.	[illegible]
3-1000	12.10 a. m.	1.10 a. m.	[illegible]
30			1,371

Average, 45.7 passengers per car.

CHECK OF OUTBOUND TRAVEL FOR FEB. 6, 1918, ON SAN PEDRO MAIN LINE, ACCOUNT SHIPYARDS.

Cars.	Left Los Angeles.	Arrived San Pedro.	Passengers.
3-1000	5.20 a. m.	6.15 a. m.	
6-900	5.30 a. m.	6.25 a. m.	
5-800	5.30 a. m.	6.20 a. m.	
5-900	5.35 a. m.	6.24 a. m.	
4-800	5.40 a. m.	6.50 a. m.	
6-900	6.30 a. m.	7.30 a. m.	
5-800	6.30 a. m.	7.20 a. m.	
3-800	6.35 a. m.	7.36 a. m.	
3-1000	6.51 a. m.	7.48 a. m.	
40			[illegible]

Average 59.17 passengers per car.

Long Beach-San Pedro line.

Cars.	Left Long Beach.	Arrived San Pedro.	Passengers.
3-500	5.50 a. m.	6.18 a. m.	
4-500	6.05 a. m.	6.42 a. m.	
6-500	6.15 a. m.	6.41 a. m.	
5-500	6.25 a. m.	6.52 a. m.	
1-1000	6.30 a. m.	7.10 a. m.	
3-500	7.15 a. m.	7.42 a. m.	
1-1000	7.10 a. m.	7.42 a. m.	
23			

Average 47.96 passengers per car.

Senator NELSON. [illegible]

Mr. KENNEDY. [illegible]

Senator RANSDELL. [illegible]

Mr. KENNEDY. [illegible]

Senator RANSDELL. [illegible]

Mr. KENNEDY. [illegible]

Senator NELSON. [illegible] While you are on that subject [illegible] of housing.

Mr. KENNEDY. [illegible] Board——

Senator NELSON. [illegible] reference to the matter of housing.

Mr. KENNEDY. [illegible]

Senator JOHNSON. [illegible] to is the fact, as I understand it, that [illegible] ment in October [illegible]

Mr. KENNEDY. [illegible]

Senator JOHNSON. [illegible] activities of the American International [illegible] months before you went there.

Mr. KENNEDY. I mean that in this way [illegible] away back——

Senator JOHNSON. What Senator NELSON is suggesting is [illegible] your activities with the American International commenced in the middle of October it would be rather difficult for you to tell about their activities four or five months before that time. I say this by way of suggestion, that you may be under no misapprehension regarding it. He was suggesting to you that you tell about your personal activities in that regard.

Mr. KENNEDY. Well, there was a matter of record preceding my coming there, Senator Johnson, which led up to what I did. If you want me to state just what I did when I came there.

Senator JOHNSON. It is immaterial to me.

Senator RANSDELL. May I ask at just what time the American International contract was signed? You spoke about a period of four or five months.

Senator JOHNSON. It was signed September 14, 1918.

Mr. KENNEDY. That is correct.

Senator JOHNSON. But the fact of the matter is that it was in negotiation for a period of six weeks—it was practically two months, but we will call it six weeks and be well within the limit—in the period prior to the resignation of Gen. Goethals and Mr. Denman

Those resignations occurred July 24, 1917. Now, you were employed, Mr. Kennedy, about the middle of October, were you not?

Mr. KENNEDY. The latter part of October.

Senator JOHNSON. The latter part; and I was calling your attention to the fact that, as suggested by Senator Nelson, it might be quite impossible for you to tell what the activities of the American International Corporation were three or four months before that time in reference to housing.

Senator RANSDELL. That is quite true; but I was wondering whether they had any activities before their contract was signed. It would certainly not be more than a month and a half after the contract was signed that he went there; if he went there in the latter part of October, and the contract was signed September 13 that would only be about six weeks after it was signed when he went there. I want the record clear on that.

Senator JOHNSON. But I think it has been testified before this committee by these gentlemen representing the American International that, at the time of those negotiations, they began to investigate the conditions there, with the end in view of ultimately preparing for their contract; that is my recollection of what they testified, substantially.

Mr. KENNEDY. And that is what I am endeavoring to bring out.

Senator NELSON. And I interrupted the witness, because he got on the question of housing; he said that he was an industrial engineer; and I wanted to know what he had done in this matter of housing.

Senator JOHNSON. That is what I was calling his attention to, because he had commenced to discuss the subject.

Senator NELSON. I did not want to get him into an academic discussion. Tell us, Mr. Kennedy, what you have done, in your company, about this matter; that is what we want to know.

Mr. KENNEDY. On the 2d day of November, 1917, in order to make a matter of record of what had preceded, we wrote a letter to the Shipping Board asking them for an appropriation of 10 or 12 million dollars, for emergency or war housing.

Senator NELSON. What date was that?

Mr. KENNEDY. November 2, 1917; I have a copy of that letter here, if you care to see it.

Senator NELSON. Did you get any response to that letter?

Mr. KENNEDY. We did.

Senator NELSON. What was that? Can you give us the substance of it?

Mr. KENNEDY. I want to be entirely honest about it, Senator, and we have had so many conferences about it that it would be hard to answer that.

Senator NELSON. I do not want you to be exact; just give us the substance.

Mr. KENNEDY. They assured us that they realized the need for housing, and would help us to get all that was necessary for the job as fast as it could be done, but that they had to have a special appropriation for that purpose, and that that was then in process of being obtained.

Senator NELSON. A special appropriation by the Shipping Board, do you mean?

Mr. KENNEDY. Well, the money was not in their hands, and had to be obtained through an appropriation from Congress.

Senator JOHNSON. Have you the letter of November 2, which you have just mentioned?

Mr. KENNEDY. Yes, sir; I have it here.

Senator NELSON. I suggest that you put that in the record.

Senator JOHNSON. Yes; I was going to suggest that, but I did not want to interrupt you.

Senator JONES. Have you a copy of the reply of the Shipping Board, Mr. Kennedy?

Mr. KENNEDY. I have not; no, sir.

Senator JONES. Well, can you furnish that?

Mr. KENNEDY. I can furnish their letters on the subject.

Senator NELSON. I would like to have inserted in the record the correspondence between your company and the Shipping Board, or the Emergency Fleet Corporation, about the matter of housing.

Mr. KENNEDY. In addition to that we have been, I would say, holding semiweekly conferences with the representatives of the Shipping Board or their housing committee at Philadelphia on this question. This has been a constant process ever since that time.

The CHAIRMAN. Is that correspondence very voluminous, Mr. Kennedy, or were there just a few letters exchanged between you and the Shipping Board or the Fleet Corporation on the subject?

Mr. KENNEDY. There were several, I would say, Mr. Chairman.

The CHAIRMAN. Well, I think there would be no objection to having them inserted in the record.

Senator NELSON. Yes; I wish you would furnish those so that they can be put in the record.

Senator RANSDELL. Yes, it seems to me that they should go in.

(The letters referred to were subsequently furnished by Mr. Kennedy, and are here printed in full, as follows:)

Executive.
Government Job No. NOVEMBER 2, 1917
P. L. REED, Esq.,
Resident Engineer, United States Shipping Board Emergency Fleet Corporation
Housing employees.

DEAR SIR: We give you herewith the results of our analysis of the labor [illegible], and transportation questions as developed by a careful survey in Philadelphia and suburbs, covering the past six weeks.

A total of 30,000 men will be required at Hog Island [illegible]. Fifteen thousand can be housed in Philadelphia [illegible] located with reference to Hog Island. [illegible] that we think will be willing to live in [illegible] limited to men used on the rough work of [illegible] for whom housing must be provided away from the plant [illegible] pendent of existing transportation [illegible].

We have found, by careful investigation, that [illegible] size on the Philadelphia side of the [illegible] Hog Island, are either slightly above [illegible] and consequently unfit for residential purposes.

These considerations indicate the [illegible] development on more suitable land [illegible] easy ferry distance of the plant. [illegible] reduce the traveling time of the workmen [illegible].

A further consideration is the fact that the [illegible] city limits will have to be of brick or [illegible] heavier investment and a greater time for [illegible] the city limits.

These three methods of transportation now require from one to one and a quarter hours each way and an inordinately high labor turnover will be inevitable. It will be necessary to spread the starting and quitting times over a period of an hour or more, in order to handle the transportation of our men by rail and trolley to the shipyard. All of the men, from both trolley and steam lines, must be turned over our shuttle service line into the yard.

It is vitally necessary that immediate arrangements be made for the housing of from 10,000 to 12,000 men, in a location independent of existing transportation lines previously mentioned, and it is these conditions that indicate the desirability of making a proper housing development on some suitable land on the New Jersey side of the river, within easy ferry distance. It is our opinion that land of sufficient acreage can be obtained within 1½ miles of ferry landings on the New Jersey side. The ferry distance would be about 1 mile, and directly opposite our wharf. The actual time of the ferry trip would be about 6 to 8 minutes. This service can be contracted for with the ferry companies at 5 cents a trip. The fare on the steam and boat lines, from Hog Island to Philadelphia, is now figured at about 10 cents each way.

We find from careful investigation, that all development tracts of suitable size, on the Philadelphia side of the river, within 2½ to 3 miles of Hog Island, are either slightly above water level, or partly submerged, and from a sanitary standpoint, the tracts are, at the present time, unsuitable for residential purposes. The time necessary, as well as the cost of preparing this ground for a housing development that would fit our needs, are both factors that would seem to eliminate this territory. The city has comprehensive plans for taking care of sanitary and storm-water sewerage, as well as drainage, in this section; but the best part of a year's time would be consumed in completing this work, if started at once.

In the vicinity of Elmwood Avenue and Seventy-third Street, there are scattered tracts aggregating 150 acres, which lie high enough to afford natural drainage. There are a couple of main line city sewers in this section. Any housing development in this locality, which would come within the Philadelphia City limits, would have to be of brick, or other fire-resisting materials, involving much heavier investment, and greater time for construction than will be the case outside the city limits. Outside of a couple of streets with sewers, we would have the regular expense of public-utility installations. Additional transportation service, over and above the maximum limits to be developed, will be required in moving men from this district to Hog Island.

In a fairly large housing development, in one unit the expense of management, maintenance, etc., is greatly reduced, and the efficiency and benefits to be derived from the welfare work, Y. M. C. A., etc., is relatively increased. On the New Jersey side, we would not be hampered by building restriction laws, nor cramped for space, if expansion were necessary. The development there, as a single unit, and on account of the character of the soil, would cost less for installation of public utilities. A railroad service in that locality could handle shipments of material for this construction work, without being affected by the congestion of materials going to Hog Island.

Several new, large industries, such as the Vacuum Oil Co., a large paint factory, and a chemical works are already established on the New Jersey side of the river, and their housing requirements are increasing as they expand. An industrial city, such as we have planned, would not only meet our needs for any period of time contemplated for the Hog Island yard activities, but would be of sufficient permanency to take care of the expansion of existing plants now located on the New Jersey side, as well as any other new industries which might seek that locality in the future, owing to labor housing quarters, and the adaptability of this land for development.

We are entirely familiar with the various methods of constructing houses of the types required. Our plans will permit the adoption, to any desired degree, of the "ready-cut" principle, or the partially mill constructed house, so that we can take advantage of any mill facilities which may be found available to supplement field fabrication methods. Our experience, and our study of the practical conditions to be met, lead us to suggest two types of houses, to be built in varying numbers: (1) Frame, one-story, attractive cottage type, in one, two, and four family units, to be without cellar; equipped for stove heat, complete bath and kitchen plumbing, wall board partitions, and of generally light construction. (2) A similar type of house, in one, two, and four family units, but provided with a partial cellar, and furnace heat. Some of these to be of two-story construction.

A satisfactory arrangement has been planned, in a comprehensive manner, which includes administration building, recreation buildings, playgrounds, fire and police protection, school, Y. M. C. A., community stores, and public utilities, such as electric light, water, sewer, gas, etc.

A rental charge, based upon 10 per cent of the gross cost of buildings and public utilities, would cover maintenance and management, and return at least 5 per c

on the investment. The management would control the Y. M. C. A., theater, which, in our opinion, would be more than self-supporting. A rental on the basis would be about one-half that charged for the same class of quarters in this locality.

The necessary control of such a housing program can only be realized by our h Government funds available for this work; and further, we fully realize the nec of starting the construction of these houses without further delay. We recom that an appropriation of from $10,000,000 to $12,000,000 be made available fo immediate execution of this very necessary provision for the completion of the building program at Hog Island.

We attach herewith a summary of estimate, as prepared by our several engine departments; we also hand you a small map showing the relative location o Hog Island plant to the city of Philadelphia and surrounding suburbs, our li transportation to the yard, and the relative location of other shipbuilding pla this locality.

Yours, very truly,

Summary of estimates.

Ground		$27
Buildings:		
Foreign and single labor quarters	$4,440,000	
American family quarters	2,600,000	
Stores, administration, and other buildings	950,000	
		7,9
Streets:		
Grading, etc	340,000	
Sidewalks	160,000	
		50
Ferry landings		5
Public utilities:		
Sewers	800,000	
Water	970,000	
Electrical distribution and street lighting	420,000	
Fire protection	100,000	
Gas	325,000	
		2,61
Overhead, including legal fees, engineering, administration, contingencies		57
Total		12,00

Senator JONES. I would like to know, Mr. Kennedy, whether Shipping Board, in substance, claimed that they did not have aut ity to use any of the money that Congress had appropriated for use of the Shipping Board for housing purposes at shipyards?

Mr. KENNEDY. Well, they felt that this bill, which has b pending here, and which passed two or three weeks ago, appropria $50,000,000——

Senator JONES (interposing). I know; but this correspondenc which you referred occurred before that bill was introduced. they claim that they had no right to use the money, which Cong had appropriated for shipbuilding purposes, for housing at shipyards?

Mr. KENNEDY. They were not sure that they had that right; no, What we did was to build, coincidently with the building of the pl housing on the island for men on the job; barracks of the contonm type, such as they build for the use of the soldiers.

Senator NELSON. When did you begin that work?

Mr. KENNEDY. It was in process when I went there, about 1st of November. And we have built and completed, and have

occupied as completed, running some several weeks back, accommodations for about 6,000 men in those barracks.

Senator NELSON. How many have you accommodations for now?

Mr. KENNEDY. About 6,000.

Senator NELSON. Those are frame or wooden buildings, are they?

Mr. KENNEDY. Yes, sir.

Senator NELSON. Temporary barracks?

Mr. KENNEDY. Yes, sir.

The CHAIRMAN. What do the men pay for the use of them?

Mr. KENNEDY. Ten cents per night.

The CHAIRMAN. Ten cents per night for a room, or just for a bed?

Mr. KENNEDY. Well, they are built as the cantonments are, with 8 rooms, 12 men in a room, of the dormitory type; there are about 12 beds in a room, and 8 rooms in the barracks, two stories high.

Senator NELSON. That makes 100 men in 8 rooms?

Mr. KENNEDY. Yes, sir.

Senator JONES. The company furnishes the cots, the covering, etc., does it?

Mr. KENNEDY. Yes, sir; also hot and cold water, showers, etc.

Senator HARDING. Does it furnish laundry facilities as well?

Mr. KENNEDY. Yes, sir; it also furnishes laundry facilities.

Senator NELSON. To whom does the money go that the men pay for this accommodation?

Mr. KENNEDY. The Government.

Senator RANSDELL. Does that 10 cents cover the expense of furnishing those accommodations?

Mr. KENNEDY. No, sir; it does not cover the expenses.

Senator NELSON. Then you also furnish the meals there, do you not?

Mr. KENNEDY. Yes; that comes under our department, the commissary department. Of course, those 6,000 accommodations would not take care of the number of men we have there; and so a department of our housing organization went out and made a house-to-house canvass of the city of Philadelphia, and we have in that way produced about 13,000 accommodations for our men. We had some little propaganda in the newspapers; and we have brought some people around to where they were willing to open up their homes to take in these men as roomers, who never had taken in roomers before, and did not need to do so for the money there was in it, but did it simply as a matter of patriotic duty.

Senator RANSDELL. Do you mean that those 13,000 are in addition to the 6,000 that you have provided for on the grounds?

Mr. KENNEDY. Yes, sir.

The CHAIRMAN. What do they generally have to pay for rent in those houses outside of the grounds, to which you have referred?

Mr. KENNEDY. That varies all the way from $2.50 a week per room up to as much as a man is willing to pay, or can afford to pay.

Senator NELSON. Has there been a disposition among the people who have houses to rent to take advantage of the situation and do profiteering?

Mr. KENNEDY. Yes, sir; that has extended all the way along the line.

Senator NELSON. Did you try to counteract that?

What I am trying to get at is, your fairest estimate of what a man would have to pay if he started out now and wanted a six-room house; a house with decent plumbing in it; a house in a decent neighborhood; if he does not expect anything high-toned or elaborate, but a fit place for a man to take his wife and children and have them live like human beings.

Senator HARDING. Do you know what those Girard houses in Philadelphia rent for?

Senator REED. Will you let him answer my question first?

Senator HARDING. Yes; excuse me.

Senator REED. What would you say that the kind of house that I have described could probably be obtained for?

Mr. KENNEDY. As I understand you, that type of house that I think you have in mind would cost not less than $35 or $40. In answer to your question, Senator Harding, I think that the cheapest of those Girard houses is $45 a month.

Senator HARDING. Those are the ones that we passed in going out to Hog Island several weeks ago, are they not?

Mr. KENNEDY. They are.

The CHAIRMAN. Are they brick or frame houses?

Mr. KENNEDY. Those houses to which the Senator refers are brick; they are rented, as you know, at a very low rental; and I think the estate figured to make only 4½ to 5 per cent on their investment in those houses.

Senator HARDING. They are very nice looking homes.

Mr. KENNEDY. They are indeed. It is a semi-philanthropic enterprise.

The CHAIRMAN. How much do they rent for?

Mr. KENNEDY. I think the cheapest is $45 per month.

The CHAIRMAN. Are they detached houses?

Mr. KENNEDY. No, Senator, they are attached.

The CHAIRMAN. Are they two-story houses?

Mr. KENNEDY. Yes, sir; two stories.

Senator RANSDELL. How many rooms have they?

Mr. KENNEDY. They will average six rooms, I should say.

The CHAIRMAN. And does the owner furnish water—hot and cold water?

Mr. KENNEDY. The owner furnishes water; there are also individual gas meters, of course, and electric light meters. The owner furnishes sewerage connections and the water only, I think.

Senator JONES. Can you give us any idea of what proportion of the men you have had working there heretofore have come from Philadelphia or that immediate vicinity?

Mr. KENNEDY. I should say less than 20 per cent.

Senator JONES. What proportion of them have been single men?

Mr. KENNEDY. We got those figures up about a week ago, and we found that 42 per cent of our men were married, which would mean that 58 per cent were single, of course. We have gone over our records and specially compiled that information.

Senator NELSON. Most of your force that you have employed prior to this time have been common laborers have they not [illegible] all no ordinary carpenters and other men in construction w[illegible] not had any special shipyard workers until very recen[illegible]

Mr. KENNEDY. No.

Senator NELSON. It is only recently that you have laid a keel, is it not?

Mr. KENNEDY. We have run up to about 40 per cent common labor, and the rest were skilled mechanics in construction work.

Senator NELSON. You had the men to do the grading there, grading up the land?

Mr. KENNEDY. Yes, sir.

Senator NELSON. And the labor used in putting up those buildings and doing the pile driving, and all of that work, most of that is common labor, is it not?

Mr. KENNEDY. About 40 per cent is common labor, and has been right along averaging that.

Senator NELSON. Well, what are the others?

Mr. KENNEDY. Skilled labor.

Senator NELSON. What class of skilled labor—carpenters?

Mr. KENNEDY. Carpenters, steam fitters, pile drivers, dock builders, engineers on trains and shovels, and all that sort of skilled construction labor.

Senator REED. And also steel laborers—men engaged in steel work?

Mr. KENNEDY. Yes, sir; structural steel erectors.

Senator HARDING. Mr. Kennedy, have you any knowledge which would indicate what percentage of your applications for employment were from men who sought the advantages of exemption from the draft?

Mr. KENNEDY. I am sorry to say, Senator, that that impression has got abroad, but we have never directly or indirectly, in our advertising made any mention of the exemption of men in the shipbuilding. Some of the shipbuilders have, or at least, an impression has got abroad somehow that an exemption would be granted to men in the shipyards. But we have never taken advantage of that idea, either directly or indirectly.

Senator JONES. Well, that impression has been given out by governmental agencies, has it not?

Mr. KENNEDY. By governmental agencies, yes, sir.

Senator JONES. Yes. So that the people of the country pretty generally have that idea?

Senator NELSON. Well, have you had many men come there to Hog Island who were liable to the draft?

Mr. KENNEDY. Yes, we have had a great many.

Senator NELSON. Where did they come from?

Mr. KENNEDY. They came from the eastern part of the United States. There was no apparent effort for them to come from distant places in order to escape the draft. And this exemption, as I understand it, is not an exemption; it is a preferment; it places a man upon a deferred list, while he is working upon shipbuilding; and I do not understand that construction labor employed in the shipyards is to be deferred or preferred.

Senator REED. Of course, you must have men who are liable to the draft, because a man can not stop work now merely because he is liable to the draft; therefore there must be some proportion of those men who go there and apply for work who are liable to the draft.

Mr. KENNEDY. The bulk of the able-bodied laborers is within the draft age.

Senator REED. Yes. I want to ask you this question, if it is not digressing too much: How many of the ways are now complete?

Mr. KENNEDY. My best information is that about 12 of them are ready now for building ships.

Senator REED. And how many keels have been laid?

Mr. KENNEDY. Two.

Senator REED. There was one that had been laid when we were down there about two weeks ago. Have they laid the second keel now?

Mr. KENNEDY. Yes, sir.

Senator REED. And you think there are 12 ways completed?

Mr. KENNEDY. I am told that there are 12 ready for the steel.

Senator REED. So that they will be laying keels for a number of additional ships, will they not?

Mr. KENNEDY. As soon as they get the steel.

Senator REED. Are they short of steel?

Mr. KENNEDY. I understand so, but I am not sure; I would rather you would ask Mr. Goodenough about those things.

Senator REED. Is he to appear before the committee?

Mr. KENNEDY. Yes, sir.

Senator REED. All right.

Mr. KENNEDY. There has been a great deal said about the hardships of the men, from the standpoint of transportation and housing, and most of it is true.

The CHAIRMAN. Before you pass from the housing question—perhaps I am anticipating a little, but I want to draw a comparison between the conditions here and those in Scotland, for instance, according to a statement that I have here. You are going eventually to have houses constructed on the island for the use of employees in this plant, are you not?

Mr. KENNEDY. Yes, sir.

The CHAIRMAN. Will they be rented to the employees, and if so on what kind of terms?

Mr. KENNEDY. I do not think the Shipping Board themselves have yet decided; but I know it is to be at very moderate terms; simply interest on the money invested, I think.

The CHAIRMAN. I have an article before me, clipped from the "Christian Science Monitor" last night. It is headed "Housing Problem in Scotch yards"; and it shows that they are having similar problems in Glasgow and West Scotland; and the statement is made that they are erecting in Mid Lannoch, for instance, 550 houses which are now in the course of construction and 250 houses ir place; and it appears, according to this article, that a M complained that nothing had been done for the miners, they had to go on waiting; and it was said that the cond very bad in some districts; he said that the Government h provided some houses, but it was at impossibly high £20 to £26 per annum; and unless some more adequate was made, Mr. Sullivan contended that there was very of trouble arising. That amount would be American money, would it not?

Senator NELSON. Yes.

The CHAIRMAN. And the statement is mad that have been constructed, only 300 were could not afford to pay this rent.

Senator NELSON. Well, you know, Mr. Chairman, that the wages of workmen there are much less than they are in the shipyards in this country.

To save time and bring the subject to a head, have you had charge of the employment of skilled labor and the experts at Hog Island?

Mr. KENNEDY. Yes, sir.

Senator NELSON. Have you had the opportunity of selecting those men, or recommending them for the places they occupy?

Mr. KENNEDY. Yes, sir.

Senator NELSON. All of the forces?

Mr. KENNEDY. Do you mean the managerial forces?

Senator NELSON. I mean the higher employees, the higher class of employees there.

Mr. KENNEDY. The skilled employees? The wage earners on the job?

Senator NELSON. The skilled employees; yes.

Mr. KENNEDY. Yes.

Senator NELSON. You have the charge of that?

Mr. KENNEDY. Yes, sir.

The CHAIRMAN. All right; you may proceed with your statement where you left off.

Mr. KENNEDY. The transportation difficulties for the workmen in getting to Hog Island were many. A mile and a half was the nearest connection from the street car. To get the men there on railroad trains, we had to push the trains around on the first switch that was put in there, because of the congestion on all the railroads, because of the severe weather, when the engines froze up and could not get up steam, and one thing and another—we have often taken as long as three hours to get the men to the job and as long to get them away in the evening. That was not the rule, but that was the exception, when it took that long; that was the extreme time. Since that time we have built our own connecting line, or "shuttle line," as it is called, and supplied our own railroad cars and engines; so that now we are able to handle our force under an hour each way, going to and from the yard; that shuttle line also connects with the street car line; we have also put in boat service between Philadelphia and Hog Island.

Senator NELSON. Another question before you drop that subject: With regard to the delay that has been caused to the men coming to and going from the yard; has that time been credited on the working time of the men?

Mr. KENNEDY. It has not, to my knowledge, Senator.

Senator JONES. Did you work them eight hours, in addition to the six hours taken in going and coming?

Mr. KENNEDY. We worked them 10 hours.

Senator JONES. Well, did you work them 10 hours in addition to those six hours?

Mr. KENNEDY. Yes, sir. Of course, you understand that that was an extreme case; that did not happen every day.

Senator NELSON. You have been working the men on the basis of an 8-hour day, but working them 10 hours?

Mr. KENNEDY. Yes, sir.

Senator NELSON. How much did you allow for the overtime?

Mr. KENNEDY. Time and a half—five days a week.

Senator NELSON. Only five days a week?

Mr. KENNEDY. Five days a week.

Senator NELSON. Then one day they were idle?

Mr. KENNEDY. No, that was on Saturdays. I will be glad to call your attention to that and explain it later; and it was double time on Sunday; I will explain that to you later.

Senator NELSON. Double time for Sundays and holidays, are you not?

Mr. KENNEDY. Yes, sir.

Senator NELSON. Is it not true that when they get double time on Sunday they keep the Sabbath on the following Monday?

Mr. KENNEDY. Some of them, I am sorry to say, have done that, but comparatively very few.

You asked me, Senator Nelson, about the commissary department, the feeding of the men. That comes within the industrial relations department, and has been a very serious problem with us from the beginning of the job. It was one of the first things we had to do.

Senator NELSON (interposing). I might, while you are on that subject, inquire whether you live up to the Hoover rules in conducting that branch of the service?

Mr. KENNEDY. Yes, sir.

The CHAIRMAN. Do the receipts from that service, of supplying the meals, pay the expenses, or is that service similar to the housing on the island? Does it cost a little more than you get out of it?

Mr. KENNEDY. We attempt to make it break absolutely even; to make it self-supporting; and practically it is that; it varies a few dollars from month to month, over or under the expenses. We have fed as high as 17,000 men a day—17,000 meals.

Senator NELSON. Do you serve three meals a day, or two?

Mr. KENNEDY. Four.

Senator NELSON. Four meals a day?

Mr. KENNEDY. Yes, sir; morning, noon, night and midnight. We charge 30 cents apiece for those meals, and I do not believe you can get as good food, as well cooked and as well prepared anywhere in the United States for the money.

Senator NELSON. What do you charge a meal?

Mr. KENNEDY. 30 cents. Some of you gentlemen were up there and partook of luncheon.

Senator NELSON. You say you serve a meal at midnight. Do you have a part of the force working at night?

Mr. KENNEDY. A small proportion, yes, sir. The members of the committee who were up there and partook of that luncheon can vouch for what it was.

Senator NELSON. What work is that small portion that works at night engaged in?

Mr. KENNEDY. We have been driving piles at night, and have done some other work requiring skilled labor, and then, of course, we have to have a maintenance crew on to take care of the engines and pumps and boilers, electric lights, and all of those things that require 24 hours' service.

Senator HARDING. You have a pretty large force of guards there, too, have you not?

Mr. KENNEDY. Yes; we have about 600 men. I have lined this statement [indicating paper in Mr. Kennedy's hand] up in headings,

so that I will keep myself straight and give you all the details as well as I can, for your information, and that subject comes a little later in my memoranda, and I would like to discuss that in a little more detail later on.

Senator HARDING. All right.

Mr. KENNEDY. One of the reasons that I brought out the size of this large community, as compared to towns, was to show the relations of the various requirements of our community to those of any other community. We are outside of the city of Philadelphia. We are in Delaware County, and we have to provide for the health and well-being of our men.

To do that we have a medical department with 20 full-time doctors. That is headed by Dr. Reilly, who is a man of some reputation in this country as an industrial surgeon and sanitarian; a man of 20 years' experience.

We have three hospitals; an emergency hospital for the treatment of men who are hurt on the job, where they are attended to when they are first hurt. Then we have a medical hospital, because we are housing many men there, and some of them get sick and we have to take care of them. Then we have a contagious-disease hospital, because we also have to take care of our own contagious diseases. We have been fortunate in not having had smallpox, but have had quite a little of measles, mumps, and so on, which are quarantined on the job, as the city of Philadelphia will not take them and Delaware County has no place to put them.

This department also analyzes the food, taking samples of it for that purpose; it analyzes the food chemically and bacteriologically, to see whether it is proper food for human consumption. We have had only four cases of ptomaine poisoning, in 1,000,000 meals which have been served on the island.

That department also has the balancing of the ration; they lay out a scheme of rationing for a week ahead; they know just how much of fats and how much of solids will be in each meal as served by the commissary department. They have charge of the sanitation, and the lay out of the toilets, sewage disposal, etc.; they plan the sewers themselves and the places on the job for the toilets where they will be of the most service. All questions of sanitation, such as mosquitoes, flies, rats, and vermin, the question of handling bedding and clothing in the barracks, etc., are handled by them. There is a sterilization house, where they take the bedding at fixed times, sterilize it, and return it fresh and clean.

Senator JONES. In connection with that, do you furnish employees to make the beds for the men, or do you expect the employees to make their own beds?

Mr. KENNEDY. No; we have janitors who do that. We even have to have a veterinary in this department, because we have as high as 2,200 horses on that island in one day. To show the wisdom of having the veterinary in the department, I will say that a short time ago we had a slight epidemic of glanders, and we stopped it in 24 hours; we shot 8 horses and took blood tests of all the rest.

Senator NELSON. What is the reason for that?

Mr. KENNEDY. Glanders is communicable to human beings, and it is practically always fatal to them. But we have had no outbreaks of it since the time I mentioned. But every horse that comes there

is given the blood test, and we keep a record of all the horses on the island and also make an examination of all the horses that come in from the city for delivery purposes.

Senator NELSON. What do you use those horses for?

Mr. KENNEDY. We have quite a number that we use ourselves, and then the subcontractors bring in horses of all sorts in connection with their work.

Senator NELSON. Do the higher officials of the company keep horses?

Mr. KENNEDY. No, sir.

Senator HARDING. You do have some mounted police, do you not?

Mr. KENNEDY. We do have some mounted police; yes, sir, but I do not think that is what Senator Nelson referred to.

I have spoken of the difficulty of getting this large number of ship builders. And the Shipping Board did a very wise thing, in the early days, in organizing at Newport News an industrial training center, in other words, a normal school for the education of instructors, who would come back and enter our school at Hog Island and teach men rapidly to become mechanics in shipbuilding. We have the school at Hog Island, a separate department all by itself, with schoolroom etc.; we also have a portion of the way, built to exact pitch [illegible] way, like one of the ways on the water front. We maintain at Newport News the maximum number of teachers to be instructed at Newport News as have been apportioned to us by the Shipping Board and have done so for many weeks past. We have had some of them graduated after a six-week course; and they are coming back to our school at Hog Island, where they are [illegible] them the different shipbuilding trades.

Senator HARDING. What wages do you pay [illegible]

Mr. KENNEDY. We pay them [illegible] learning; and as soon as they graduate [illegible] receive the regular wages for [illegible]

Senator REED. And what are [illegible]

Mr. KENNEDY. That [illegible] of the wages fixed by the wage-[illegible]

Senator NELSON. What [illegible] while they are learning?

Mr. KENNEDY. That [illegible] that I have spoken of [illegible] as if it was down on the [illegible] only the theory, but the [illegible] learn how to use [illegible] be about a ship and [illegible]

When they are [illegible] had them takes [illegible] they are [illegible] expect to turn [illegible] six weeks. After [illegible] stop, but expect [illegible]

Senator NELSON [illegible] this time, have [illegible]

Mr. KENNEDY [illegible] running on the [illegible] We have graduated [illegible]

on useful work, preparing themselves for shipwork, as the steel comes in.

An interesting department that we have that would hardly be expected, at first blush, there, is the service department. It publishes the Hog Island News, or the plant newspaper, which we feel is just as essential to the job as any newspaper is to its community. Through which we attempt to build up the esprit de corps, or the morale of the men on the job, telling them what the purpose of the work is, what is going on, and keeping them from feeling as if they are simply a lost atom, all by themselves, making them feel that they are really part of a great, big, well organized plan or scheme; that each man has his place in the organization, and that he is doing his bit; that he is performing just as much service, whatever he is doing, as the man in the Army. That paper is published now every two weeks, but we hope to publish it every week very soon. That department also looks out for the grievances of the men, if they have any complaint about their treatment in any way at the hands of the foreman, superintendent, or anything of that sort.

We have had some 14,000 individual cases of grievances of men on the job, of a hundred different kinds, that this department has taken care of.

The CHAIRMAN. Before you get away from that publication, can you give us an idea of what it costs to get it out—as it is published now, and also as a weekly publication?

Mr. KENNEDY. I shall be very glad to send you an exact statement of what it has cost for each publication; I would much rather do that, Mr. Chairman.

The CHAIRMAN. That would be satisfactory; I simply wanted to get an idea of what the expenses of it have been.

(The statement referred to was subsequently furnished by Mr. Kennedy, and is here printed in full, as follows):

MEMORANDUM.

AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION,
March 13, 1918.

Re cost of Hog Island News:

There have been five editions to the Hog Island News printed to date.

The first issue came out on January 1, 1918; 15,000 copies of eight pages each were printed.

Cost of printing	$225.00
Cuts	107.90
Postage	7.78
Total	340.68

There are only about 50 copies of this issue on hand. They have all been distributed with the exception of these few.

The second issue came out January 15, 1918; 15,000 copies of eight pages each were printed.

Cost of printing	$260.00
Cuts	74.25
Postage	7.63
Total	341.88

There are about 50 copies of this issue on hand.

The third issue came out February 2, 1918. There were about 22,261 copies of 12 pages each.

Cost of printing, including 4 extra pages	$504.00
Cuts	165.25
Postage	22.36
Total	691.61

There are about 250 copies of this issue on hand.

The fourth issue came out February 16, 1918, and included 20,000 copies of eight pages each.

Cost of printing	$278.75
Postage	22.84
Total	301.59

There are 200 copies of this issue on hand.

The fifth issue was printed on March 1, 1918, and included 22,233 copies of 8 pages each.

Cost of printing	$311.70
Postage	22.33
Total	334.03

Each copy of the News has at least five to six halftones. The bills for the other cuts have not as yet passed through the office.

We have a mailing list of 2,500 names. The Hog Island News is also distributed at the Broad Street office, Fifteenth and Cherry Streets, Camden office, and Hog Island. The above figures are approximate, but I believe they are substantially correct.

Total number of copies to date, 94,494, cost $2,009.79.

The percentage cost of the first edition, including cuts, 0.0227; second edition, including cuts, 0.0227; third edition, including cuts, 0.031; fourth edition, without cuts, 0.015; fifth edition, without cuts, 0.015.

Mr. KENNEDY. Of course, in a job of this size, with that many men working, we have a great many telegrams telling of sickness or death in the workmen's families, special delivery letters, and special messages from the city, if the man lives there. All of those messages have to be delivered to the job; and a man may be working a mile or a mile and a half away.

Then, laundry agencies have to be established for the convenience of the men. We are installing laundry machinery there now. News stands, barber shops, and that sort of thing have to be maintained for the men who live there, because those are simply necessities that the men require. We will have wash houses down on the water front, which will be ready before they are needed by the men in the shipyards proper, where a man can go in the morning before he starts to work, take off his clothes, put them in a locker and put on his working clothes; and when he comes out in the evening, wringing with perspiration, he can take those working clothes off, take a shower bath, put on his street clothes and go home in the street car or train, without being embarrassed by his dirty, greasy, clothes, sitting down beside some woman, with a nice light dress on, and all that sort of thing.

Senator JONES. What proportion of the employees take advantage of that?

Mr. KENNEDY. Well, we have not had any experience that I could give you as to that; these things are in the course of preparation now. But in large manufacturing plants where men are engaged in dirty work, such as shipbuilding, a very high percentage

of the men take advantage of those accommodations, and they practically demand them, in a well regulated organization.

The safety department is very necessary up there, because of the hazardous nature of the work. It is their work to inspect the property continually, provide mechanical guards for saws, belting, and machinery of all kinds; provide traffic rules and speed regulations for trucks and automobiles on the streets and roads, because we have nearly 30 miles of those on the property.

Senator NELSON. Have they had many accidents there?

Mr. KENNEDY. Yes, sir; we have had a large number.

Senator NELSON. Have you kept a record of them?

Mr. KENNEDY. Yes, sir; we keep a record of them.

Senator NELSON. Of the accidents?

Mr. KENNEDY. Yes, sir.

Senator NELSON. Can you furnish us a copy of that?

Mr. KENNEDY. Yes, sir.

Senator NELSON. I would like to have that information for the record.

(The statement referred to was subsequently furnished by Mr. Kennedy and is here printed in full as follows:)

Hog Island accident report, Oct. 1, 1917, to Mar. 1, 1918.

Month.	Average number employees.	No time lost.	Minor.[1]	Major.[2]	Death.	Total.	Frequency in percentage.[3]
October	2,010	187	.....	7	.....	194	0.35
November	6,207	630	17	17	.....	664	.55
December	14,443	1,691	92	61	8	1,852	1.11
January	19,031	2,199	156	37	7	2,399	1.05
February	21,120	1,571	164	90	2	1,827	1.27
Total	12,435	6,278	429	212	17	6,936	1.08

[1] Time-losing accidents, 1 to 14 days.
[2] Time-losing accidents, in excess of 14 days.
[3] Percentage of working force sustaining time-losing injuries.

Senator JONES. Can you give us any idea now of the number of deaths there that have resulted from accident?

Mr. KENNEDY. Twenty-five deaths from accident since the job started; about 1,748 accidents occurred last month, as near as I remember. That means accidents of all kinds, including little scratches or abrasions; because we insist on a man going immediately to our emergency hospital to have those wounds dressed in order to prevent infection. While that will seem to the layman to be a large number of accidents, you will find when you compare those statistics of the United States Department of Labor, that that is not a large number at all.

Senator JONES. I was going to say that I was surprised at the small number of deaths, taking into consideration the large number of men you have there, and the fact that they are employed on urgent work.

Mr. KENNEDY. You will find that it is not a large number, considering the hazards of this particular job. We have a large number of railway crossings, because we can not afford to build bridges over all of them or tunnels under them.

We provide first-aid kits and first-aid crews, so that some few men in a gang will know what to do if a man is hurt, to stop the flow of blood, put on a tourniquet, and that sort of thing, until the ambulance comes along, or the medical department takes charge of the case.

Senator HARDING. Are the accidents at Hog Island covered by employers' liability insurance?

Mr. KENNEDY. The Pennsylvania compensation act provides for that; I am glad that you brought that question up, because it brings out the fact that nearly all of this sort of thing we are doing is, at least partially, required by the Pennsylvania State law; in other words, the safety work, the inspection, and all that sort of thing, in the safety department, is required by the safety department of Pennsylvania, under the workmen's compensation act. The sanitation comes under the health department of Pennsylvania; their inspectors constantly come in; and Federal inspectors come up there, to see that we do what we should do in those respects.

Senator NELSON. I suppose the Federal compensation law also would apply in those cases, because the men are paid by the Government, and are really in the Government service?

Mr. KENNEDY. That question is up, I understand, now in the legal department at Washington; it has not been settled yet.

Senator NELSON. Well, we need not discuss that in detail here.

Mr. KENNEDY. We have in the guard 600 men. They are divided into three shifts of eight hours, because they must constantly watch this property. We have the danger of spies and alien enemies.

Senator NELSON. Have you had any cases of that kind where you have been threatened by spies or alien enemies?

Mr. KENNEDY. I do not know whether this should be made public or not; but we found last month 245 pounds of dynamite on the job—not in one lot, but a total of 245 pounds, that should not have been there. And that dynamite, if properly exposed and intelligently exploded by an expert, would blow up about half of the plant.

Senator NELSON. Could you get on the track of the men that placed it there?

Mr. KENNEDY. That matter is in the hands of the United States Secret Service. But that will show you that that is rather a serious menace with us all the time. And this work has got to be just as near "foolproof" as possible.

Senator NELSON. While you are on that subject, do you take any pains to ascertain that the men you put on the job are patriotic and loyal to the Government, or are any of them men that are likely to put a monkey wrench into the cogwheel?

Mr. KENNEDY. We try to take care of that. We have not been able to do that to the extent that we will when we are engaged on ship work, because in construction work there is not the opportunity for damage that there will be when there is a million dollars' worth of steel in a ship. But we do not employ any aliens on the water-front zones——

Senator NELSON (interposing). You mean enemy aliens, do you not?

Mr. KENNEDY. Enemy aliens; yes, sir.

Senator JONES. On how many different occasions did you find dynamite on the island?

Mr. KENNEDY. My best recollection is that we found it on 14 or 15 different occasions, in different sized packages, hidden away; in two or three cases buried. Of course, we have Secret Service men there all the time, and they have ferreted out many of these cases. At other times we have found it covered up with material, showing that it was deliberately placed where it had no business to be.

Senator JONES. How recently have you found it?

Mr. KENNEDY. Cases have been called to my attention within the past 10 days.

Senator NELSON. Do you take any pains to observe the men when they come to work, as to whether they are carrying anything with them?

Mr. KENNEDY. Yes, sir; we do.

Senator HARDING. If the Senator from Minnesota would try to enter the gates at Hog Island, he would find out that they are very careful. I will say that the senatorial delegation which went up there several weeks ago had to have passes in order to get into the yard.

Senator NELSON. Well, I am not surprised at that. [Laughter.]

Senator JOHNSON. What proportion of foreigners are employed on the job there?

Mr. KENNEDY. What do you mean by "foreigners," Senator Johnson?

Senator JOHNSON. Let us say, first, those who are not citizens.

Mr. KENNEDY. I would say less than 15 per cent.

Senator JOHNSON. And what particular nationality predominates?

Mr. KENNEDY. I want to be as fair as I can, and give my best judgment on that. I would increase that percentage to between 20 and 30 per cent; and we have restricted those almost entirely to the Italians and Russians. We have not used any men from the central European nations at all; and you understand that those people constitute the body of American manual labor in ordinary times. We have been very hard pressed in that respect because of that fact.

Senator JOHNSON. The Italians predominate, do they?

Mr. KENNEDY. Yes, sir.

Senator JOHNSON. Of unnaturalized Italians, about what proportion would you say are employed there?

Mr. KENNEDY. My best judgment of that would be that a little over half of them would be unnaturalized.

Senator NELSON. Well, the Russians that you employ are mostly Russian Jews, are they not?

Mr. KENNEDY. Well, there have been a great many Jews who have come down there, yes; but I would not say that they would predominate among the Russians.

Senator NELSON. I know that one witness who appeared before the committee testified that you had so many Russian Jews there that it was hard for the Americans to walk over the grounds.

Mr. KENNEDY. We have had a good deal of exaggeration about Hog Island in many respects.

Senator HARDING. Let us have a little information about that. It has been testified before the committee that there are so many men employed there that it is hard to get around among the idle men. What have you to say about the devotion of those numerous employees to their tasks and the alleged wasteful idleness?

Mr. KENNEDY. Well, in answer to your question, Senator Harding, I will say that that sort of charge has hurt our country's cause a good deal. That sort of statement is greatly exaggerated: it may be made with good intention. I do not mean statements at the hands of this committee. I mean at the hands of the witnesses who have appeared before the committee, and experts here who have testified about it. Because, in the main, American labor is loyal, absolutely loyal: I am convinced of that.

Senator NELSON. There is not any question about the loyalty of American labor.

Senator HARDING. No: you misconstrue my question entirely.

Mr. KENNEDY. Well, I am leading up to that.

Senator JOHNSON. Well, do not labor under the impression that anybody has questioned the loyalty of American labor in anything that has been said here; and the particular charges concerning labor there at Hog Island have been made, not by those to whom you advert, but by men who are official representatives of the Shipping Board of the United States. Now, if you desire to charge those gentlemen who hold official positions with endeavoring to injure our country by the statements that they have made to this committee, well and good: that is your privilege: I have not any objection to that.

Mr. KENNEDY. Well, I do not mean to do that.

Senator JOHNSON. I wanted to make that plain to you.

Mr. KENNEDY. I understand. I do not mean to do that. Those questions are questions of opinion, and if experts of the Shipping Board, charged with the duty of checking up the work on the job thought those things were true, it seems to me that they should have said so, and have told us that some of those men should have been let go.

But the facts are these: We have had this terrible winter, with which you are all familiar; we have problems here that never have confronted any job before that I ever heard of—rolling the whole thing into one. We have 200 cars coming in there in a day, loaded with different kinds of material.

For example, in ordinary weather, a carload of cinders would come in there and we would dump it simply by turning a ratchet, and at a cost of a fraction of a cent per cubic yard it could be unloaded. But in the past winter it required tremendous labor of a number of men; we had to have steam pipes and thaw it out: and the men would have to go in there and dig it out at a tremendous cost of time and labor.

And then would come in another car loaded with piles, which ordinarily we unloaded by simply pulling a couple of stakes, requiring a few seconds and a small number of men.

I will give you one incident that will give you an idea of conditions there. We were informed by the railroads that we would have quite a large amount of lumber coming in at 7 o'clock on a certain morning. We called up the representative of the carpenters' union in Philadelphia and told them that we would like to have 250 carpenters on the job the next morning. He said he would try to help us out; and he got hold of nearly that number of men, and they got out there the next morning, and there was no lumber for

them to work with; the lumber had not been delivered by the railroad; I presume they had done their best. But there was no lumber there, and there were those carpenters, who simply had to give up their work, and they felt very badly about it. But we had no work to give them, we had no lumber for them to go on with; and we explained it as best we could to their representative. But we felt that we would have been much more open to criticism if we had had the lumber and no carpenters to work on it than if we had had the carpenters and no lumber for them to work on. Now, that is simply an example of the kind of things that happened the entire winter.

Senator JONES. You did not pay those men?

Mr. KENNEDY. We did not hire them.

Senator JONES. They were out to the extent of their wages for that time?

Mr. KENNEDY. They were out that much: it was unfair to them, of course.

Senator JONES. I should say it was.

Senator HARDING. The thing I had in mind is that somebody has testified before this committee that so many men were employed and they were so inefficiently managed, that they were falling over each other in idleness. That is what I wanted to bring out.

Senator JOHNSON. Yes; that is in the official report of representatives of the Shipping Board as to this particular project.

Senator VARDAMAN. May I suggest to the witness that he comment on Mr. Felton's statement,which is found on page 1262 of the hearings, Part 5, which is as follows:

"I watched the men congregated at different points around the yard, and I should estimate that possibly between 5 and 10 were working out of every gang of 100. I never in my life saw such idleness. Of course, we know the conditions under which labor is employed and we expect inefficiency, but I believe smaller gangs and more foremen would remedy the defect to a great extent, but good foremen should be selected. Half of the men we saw at work, organized in proper size gangs, would have done more work than all the men that were there the day of our visit."

Senator NELSON. Who is that report by?

Senator VARDAMAN. That is by Mr. Felton, the former railroad man; it is in a letter addressed to Mr. Hurley.

Senator NELSON. Mr. Felton, formerly head of the Great Western Railroad, yes.

Mr. KENNEDY. Senator, I do not wish to get into any altercation, or to question the veracity of anybody, but I am told by persons who knew of Mr. Felton's visit that he arrived there soon after 12 o'clock, when the men lay off to get their dinner. They have their dinner hour then, during which they are not supposed to work; and I am informed that he went over the yard in a limousine automobile from then until 1 o'clock, when he went to his luncheon, at the mess hall on the island, and that he then got into his limousine and went away.

Now, I say that in all good spirit, in a spirit of fairness; but the men deserve the same spirit of fairness that Mr. Felton's testimony deserves.

Senator VARDAMAN. Of course, we do not know anything about it except what the witnesses have testified before the committee.

We have no other way of knowing about it. I presumed that Mr. Felton was a man of veracity and integrity, and would not take advantage of the opportunity he had to misrepresent the facts. I know nothing about it, however.

Mr. KENNEDY. I think he stated the facts exactly as he saw them, because he saw the men at their lunch hour.

Senator JONES. Did he not know that it was their lunch hour?

Mr. KENNEDY. I do not know, sir.

Senator VARDAMAN. Do you think it was fair for him to make that statement, if he knew that it was customary for the men to lay off at that time?

Senator NELSON. You say that Mr. Felton did so-and-so; you do not know that he did those things, do you?

Mr. KENNEDY. No, sir; I do not know anything about it myself. I was not there at the time.

Senator NELSON. Where were you, then?

Mr. KENNEDY. I do not know.

Senator NELSON. Do you stay there every day?

Mr. KENNEDY. Yes, sir.

Senator NELSON. Do you not keep track of it?

Mr. KENNEDY. Yes, sir; I spend all my time on the island.

Senator NELSON. Then, it seems strange that you did not see him—that a prominent man like you did not see a prominent man like Mr. Felton. I should think that two men like you and him would have met, under the circumstances.

Mr. KENNEDY. I am not introduced to all the men that come there, Senator, by a good deal. I am an employee, like a great many others.

The CHAIRMAN. Mr. Kennedy, to pursue Senator Harding's question, which was along the same line, you made your responses to Mr. Felton's statement, but you have not yet covered the facts.

Senator HARDING. Yes; I want your opinion, your knowledge, concerning that.

Mr. KENNEDY. I do not think those statements true, as the hypothetical question was put to me. There has been, judging by what would be the normal production in peace times, waste of labor on this job; but in the premises as we have them here, with our necessity for ships, and the fact that we needed men when we needed them, to-day, and not tomorrow—I do not think there has been a surfeit of labor in that job, or that the labor has been inefficiently handled. And it has been my business to be out on the job, to be among the men studying these problems; and I do not think there has been inefficiency of labor or a surfeit of labor.

Senator REED. Mr. Kennedy, you have a statement of the wages that are paid those men, have you not?

Mr. KENNEDY. I have.

Senator REED. Have you that statement with you?

Mr. KENNEDY. I have.

Senator REED. I do not want to interrupt the course of your statements; but since Mr. Felton's letter has been quoted from, there is another statement in that letter that I would like to test by a fact that it seems to me ought to be indisputable. Mr. Felton says:

As an illustration of what might be termed extravagance in the employment of labor, my brother, who has charge of labor in Philadelphia, told me that the wages paid had thoroughly demoralized the labor market in Philadelphia, and had tr

there so many men that there was no way to accommodate them. On one night recently they actually had to put them in the vacant cells in the police stations to sleep.

The kernel of that statement is that the wages paid were so excessive that they attracted labor from all over the country, and that demoralized the labor market; therefore, if we can find out what the wages were, we may be able to form an opinion as to whether this statement is an accurate statement or not. So I would like to know what the wages are that you are paying there for common labor, and for other kinds.

Mr. KENNEDY. That will require some explanation, to be absolutely fair, Senator.

Senator REED. Yes; all right.

Mr. KENNEDY. I have before me here [indicating] a decision as to wages, hours, and other conditions in the Delaware River and Baltimore shipyards by the Shipping Board labor adjustment board, dated February 14, 1918.

Senator REED. Will you state what that board is and by whom it was appointed?

Mr. KENNEDY. I do not know whether the members were appointed by the President or by his authority by the Shipping Board itself; but that is a board that has already gone to the Pacific coast and fixed the wages for the men out there in the shipbuilding trades.

Senator REED. It is a board appointed by the United States Government, or some one of the organizations which the United States Government has created?

Mr. KENNEDY. It is an arm of the Government.

Senator NELSON. I think it has been appointed, partly by the Department of Labor and partly by the Shipping Board; that is my impression.

Senator HARDING. I think if you will go into it a little more deeply, you will find that it was appointed at the suggestion of the Council of National Defense and has the sanction of the Department of Labor and the labor organizations.

Senator REED. That being the case, the situation is that the men of Hog Island are not responsible for it.

Senator HARDING. Not at all; that is a governmental organization essentially

Senator REED. I would like to know when they made their decision; whether it was before Mr. Felton's letter was written, on January 18, 1918?

Senator NELSON. Had we better not find out first what the wages were before that decision, and how much they have been increased by it?

Senator REED. I thought I would first find out what the date of the decision was.

Mr. KENNEDY. I want to tell you just a few of the circumstances in the case. We started in and our instructions were that we were to pay the prevailing wages in that district, in that vicinity; that we were to conform to the conditions, hours, and terms of employment in effect and practice in that vicinity, and that we could not institute a wage or a condition of employment without submitting it to Washington, to the wage adjustment board, for confirmation, and those instructions we have absolutely followed ever since the job began

[illegible]

we have [illegible] wages on the [illegible]

was made [illegible]

Mr. Felton's letter was [illegible]

Senator [illegible]. [illegible]

from the [illegible]

Mr. KENNEDY. [illegible]

Senator REED [illegible]

it or authorized [illegible]

Mr. KENNEDY. We [illegible]

[illegible] if [illegible]

[illegible] work. We [illegible]

Philadelphia [illegible]

we [illegible]

wages per [illegible]

we simply [illegible]

find whatever [illegible]

existed in Philadelphia.

Senator REED. [illegible]

employing labor—I presume [illegible]

made any decision [illegible]

it up among [illegible] did you [illegible]

Mr. KENNEDY. Well, [illegible]

paying and had sanctioned [illegible]

Senator REED. Even at that time?

Mr. KENNEDY. Yes, sir.

Senator REED. Then [illegible] asked a [illegible]

time first, you have worked on a scale of wages [illegible]

or fixed by the wage adjustment board.

Mr. KENNEDY. Yes, sir.

Senator REED. And you have [illegible]

percent?

Mr. KENNEDY. We have.

Senator REED. So that, if you have paid excessive wages [illegible]

here by Mr. Felton, you say that it was because you were [illegible]

to pay them by the wage adjustment board. You do not say, I

presume, that they are excessive. I am not asking you to say that

but whatever you paid, the wage adjustment board [illegible]

for?

Mr. KENNEDY. Yes, sir; and I do not think I would say they

were excessive, because they were figured upon the prevailing rate

and conditions as they existed in Philadelphia and vicinity at that

time.

Now, to go further; you mentioned the date of January 15. This

decision, as corrected and extended to March 1, 1918, is retroactive

and we must make adjustment on all wages paid by us since the

15th day of January, 1918; and in this decision the rates are in-

creased over what we had been paying upon the demands of the

various crafts, at an average of about 20 per cent.

Senator NELSON. Let me ask you this question. What was the

difference in the scale of wages after the contract was entered into

on the 13th of September for the balance of the year 1917 and

the wages that prevailed the year before, 1916?

Mr. KENNEDY. Well, when this contract was first talked about——

Senator NELSON (interposing). What I am trying to get at is this: I simply want to know how much increase there was in wages in 1917 over those of 1916—the percentage of increase, as near as you can give it?

Mr. KENNEDY. From 30 to 50 per cent in the different crafts.

Senator NELSON. About 50 per cent.

Mr. KENNEDY. No; that is the extreme; from 30 to 50 per cent.

Senator NELSON. The wages in 1917 were increased over those 1916 from 30 to 50 per cent?

Mr. KENNEDY. Yes, sir; for instance, in June, 1917, the common labor wage, the accepted wage, in Philadelphia, at the time this contract was first considered was 25 cents an hour.

Senator NELSON. Yes.

Mr. KENNEDY. And by October that had increased, not because of our activities, because we had not begun there at that time—anywhere from 32 to 37½ cents per hour at the hands of private persons.

Senator NELSON. And how much is it now? How much is it over that higher scale?

Mr. KENNEDY. It is fixed at 40 cents an hour in this new finding of the wage adjustment board.

Senator NELSON. Forty cents an hour for common laborers?

Mr. KENNEDY. Forty cents an hour for common laborers in this finding. And we are still paying 35 cents on construction work.

Senator NELSON. For eight hours?

Mr. KENNEDY. Per hour, for eight hours.

Senator NELSON. And overtime except on Sunday at time and a half.

Mr. KENNEDY. That varies in the different crafts; each union has its own regulation as to overtime.

Senator NELSON. Are you employing only union labor there?

Mr. KENNEDY. No, sir; this is an open shop.

Senator NELSON. Well, you say they have different rules as to overtime?

Mr. KENNEDY. Yes; we have run open shop without discrimination, as provided for directly in this finding [indicating]; we are ordered to do that by article 14 of this finding; but we endeavor to comply with the requirements of the different crafts.

Senator NELSON. Have you got this wage finding that you refer to there?

Mr. KENNEDY. Yes, sir.

Senator NELSON. Will you please put that in the record? I do not think we have that in the record yet, Mr. Chairman.

The CHAIRMAN. No; I think not.

Senator NELSON. Will you furnish that?

Senator HARDING. It is scarcely necessary to cumber the record with that, Mr. Chairman, it is practically a public document.

Senator NELSON. Well, I do not know; I have never seen it.

Senator REED. I think it ought to go in.

Senator VARDAMAN. Does that wage adjustment board fix all the wages and salaries?

Mr. KENNEDY. It fixes all the wages.

Senator VARDAMAN. And I understand you to say that you have not fixed any salaries that have not met with the approval of the

officers of the United States Government who are supervising this work?

Mr. KENNEDY. That is correct, sir.

Senator REED. Now to clear up one matter, or at least, make it plain: I understand you to say that the wage adjustment board recently made a decision, which was retroactive, and that decision raised the wages of the men beyond what they had been paid prior to that decision about 20 per cent?

Mr. KENNEDY. That was the average.

Senator REED. The average, and that decision was made on what date?

Mr. KENNEDY. On February 14, 1918, and corrected and extended to March 1, 1918; this is the official copy that I have here [indicating].

Senator NELSON. Well, I never heard of that or saw it in print.

Senator REED. I think that ought to go in the record; yes.

The CHAIRMAN. That finding of the wage adjustment board will be inserted in the record at this point.

(The paper referred to is here printed in full, as follows:)

DECISION AS TO WAGES, HOURS, AND OTHER CONDITIONS IN DELAWARE RIVER AND BALTIMORE SHIPYARDS BY SHIPBUILDING LABOR ADJUSTMENT BOARD, FEBRUARY 14, 1918. CORRECTED AND EXTENDED MARCH 1, 1918.

[The corrections and extensions in this revised and authoritative edition of the Decision of February 14, 1918, have resulted from conferences with representatives of the shipyard owners and of the employees concerned, and are intended to clear up ambiguities and misunderstandings, as well as to fix rates for a few occupations not previously covered.]

DECISION AS TO WAGES, HOURS, AND OTHER CONDITIONS IN DELAWARE RIVER AND BALTIMORE SHIPYARDS.

First. During the month of October, 1917, when the Shipbuilding Labor Adjustment Board was absent on the Pacific coast, disputes arose in different steel shipyards in the Delaware River district. These were temporarily adjusted through the efforts of Mr. Raymond B. Stevens, vice chairman of the United States Shipping Board, with the understanding that any wage scale subsequently determined by the Shipbuilding Labor Adjustment Board should be retroactive to the date when the men returned to work, November 2. Although there may be some question as to whether this understanding was intended to apply to yards in which disputes had not yet arisen, we have decided to resolve this in favor of the employees and to make the wage rates fixed retroactive as regards the shipbuilding crafts to which they apply to November 2 for all of the steel shipyards of the Delaware River district actually engaged in the building of ships for the Navy Department or the Emergency Fleet Corporation, that is:

Chester Shipbuilding Co., Chester, Pa.
Harlan Plant, Bethlehem Shipbuilding Co., Wilmington, Del.
New Jersey Shipbuilding Co., Gloucester, N. J.
New York Shipbuilding Co., Camden, N. J.
Pennsylvania Shipbuilding Co., Gloucester, N. J.
Pusey & Jones Co., Wilmington, Del.
Sun Shipbuilding Co., Chester, Pa.
Wm. Cramp & Sons Ship & Engine Building Co., Philadelphia, Pa.

We do this because early in our investigation we became convinced by the unanimous testimony of both sides that a uniform minimum wage scale and uniform piece rates for all of the shipyards on the river from Bristol to the north, to Wilmington to the south, would be desirable and because limiting the retroactive provision to employees who actually struck would amount to penalizing those who, notwithstanding their dissatisfaction with conditions, remained loyally at work, and thus be an incitement to future strikes.

For the yards predominantly in course of construction, that is, of the American International Shipbuilding Corporation, at Hog Island, Pa., of the Merchant Shipbuilding Corporation, at Bristol, Pa., and of the Traylor Shipbuilding Corporation,

at Cornwells Heights, Pa., we make the wage rates fixed for crafts engaged in construction work, which appeared before us with definite demands, to wit: Carpenters, plumbers, pipe fitters, electrical workers, sheet-metal workers, painters, blacksmiths, molders, and engineers, retroactive to the date when we held our hearing on conditions in those yards, that is, January 15, 1918.

For the yards in and near Baltimore, that is, of the Baltimore Dry Dock and Shipbuilding Co., of Baltimore; of the Bethlehem Shipbuilding Corporation, Sparrows Point, Md.; of the Maryland Shipbuilding Co., Sollers Point, Md.; and of Henry Smith & Sons Co., Baltimore, we made the wage rates fixed retroactive to February 1 in accordance with an agreement with representatives of the employees in those yards.

Second. The most serious obstacle to the maintenance of a uniform minimum wage scale in all of the yards of the district is the variable expense for transportation to and from their work to which the employees of the yards up and down the river from Philadelphia are put owing to inadequate local housing facilities. To equalize this condition we hereby authorize shipyards whose employees are compelled to expend regularly more than 8 cents for transportation to or from their work, to provide such employees with commutation or other tickets, at the expense of the company. In providing free transportation for employees coming from a distance, each shipyard must adopt such precautions to prevent the privilege from being abused as may be prescribed by the auditors of the Navy Department and the Emergency Fleet Corporation. We permit the payment of the entire fares of such employees rather than merely of the excess over 16 cents to enable yards with inadequate local housing facilities to draw their employees from greater distances.

Third. As regards hours of employment, we have found a good deal of diversity and confusion in the different yards growing out of the fact that although the eight-hour day has not yet been universally introduced, the half holiday on Saturday is an institution that is firmly established and tenaciously adhered to. Under the Federal eight-hour law, work in excess of eight hours in any calendar day for any department of the Government counts as overtime. It is in the light of these limitations imposed by Federal law and local custom that we prescribe the following rules to govern hours of employment in the shipyard to which this decision applies:

(1) Eight hours shall constitute a day's work from Monday until Friday, inclusive, and four hours on Saturday.

(2) Work in excess of these periods on any week day shall be calculated as overtime and paid for at the rate of time and one-half.

(3) Work in excess of 60 hours a week for any employee shall not be permitted, excepting in dry docks, or when ordered by the Navy Department or the Emergency Fleet Corporation, or to protect life or property from imminent danger.

(4) Work on Sundays and the following holidays shall be paid for at the rate of double time: New Year's Day, Washington's Birthday, Decoration Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day.

(5) Men employed on night shift shall receive compensation 5 per cent higher than is paid to those employed on day shift.

Our purpose of limiting work of employees under ordinary circumstances to 60 hours a week is to discourage the practice of excessive overtime, which we believe leads to inefficiendy and lessened rather than enlarged production, and to encourage the introduction of the two and three shift systems. The feasibility of working two or three eight-hour shifts in shipbuilding plants has been conclusively demonstrated, and we urge the shipyards of the Delaware River district to take immediate steps looking toward the introduction of additional shifts in their yards.

In addition to the straight day wage, and the piece wage systems we have found in operation in different yards numerous bonus premium, and contract systems of wage payment. The minimum-wage scale and the piece-rate scales which we prescribe are designed to introduce a greater degree of uniformity in connection with wage payments. We, therefore, direct that no bonus or premium in addition to the rates wages prescribed in this award, shall in future be paid, except with the express permission of this board. This is not intended, however, to prohibit shipyards from paying piece rates to employees in other occupations than those covered by the appended piece rate scales.

Fourth. In certain departments, for example, the departments of riveting and chipping and calking, we have found a preference for the piece wage system on the part of not only employers but also of the workers themselves. The piece rate scales appended hereto were the result of conferences between representatives of the yard owners and of the crafts concerned, in which concessions in the interests of harmony and greater production were made by both sides. It is intended that the list shall be from time to time extended to include operations and types of vessels, such as torpedo boat destroyers and cylindrical oil tankers, for which fair rates have not yet been

Ninth. [illegible] minimum rates fixed in [illegible] rates.

Tenth. The piece rates [illegible] in the schedule appended [illegible] pay in accordance with the [illegible] 44 per cent; to the holders [illegible]

Eleventh. The piece rates to be paid for chipping and calking, and drilling and reaming are those set forth in the schedules appended hereto. (Exhibits C, D, and E.)

Twelfth. The piece rates to be paid to linermen in the William Cramp & Sons Ship & Engine Building Co., and in other shipyards employing linermen at piecework are those set forth in the accompanying schedule. (Exhibit F.)

Thirteenth. No reduction in any of these piece rates is to be permitted on the part of any shipyard in the Delaware River district during the duration of the war.

Fourteenth. Believing that in this national emergency past differences between employers and employees must be forgotten in the common determination to produce the maximum possible number of ships, the board will not tolerate any discrimination either on the part of employers or employees between union and nonunion men.

Fifteenth. Rates of wages for occupations not covered by this decision shall be tentatively agreed upon between the individual shipyards and employees concerned. Such tentative rates shall be reported to the examiner, who shall satisfy himself as to the fairness of the rates tentatively fixed and report a recommendation for their confirmation or modification by this board. The board shall on the basis of such report and recommendation determine a uniform minimum rate for each such occupation, and add it to the rates prescribed in this award.

Sixteenth. The rates and other conditions prescribed in this decision, except as otherwise provided, shall be put into effect on or before Monday, February 25, 1918.

(Signed) V. EVERIT MACY,
Chairman.
(Signed) LOUIS A. COOLIDGE.
(Signed) A. J. BERRES.

WASHINGTON, D. C., *March 1, 1918.*

EXHIBIT A.

Minimum wage scale for journeymen, specialists, helpers, and laborers in specified crafts in Delaware River and Baltimore shipyards.

	Rate per hour
Acetylene department:	
Burners, first class	$0.65
Burners, second class	.60
Grinders	.50
Chippers	.50
Welders	.65
Helpers	.46
Anglesmith department:	
Anglesmiths, heavy fires	.87½
Anglesmiths, heavy fires, helpers	.55
Anglesmiths, other fires	.72½
Anglesmiths, other fires, helpers	.46
Furnace men on shapes and plates (ship work)	.82½
Electric welder	.65
Blacksmith shop:	
Hammer and machine forgers, heavy	1.35
Heater	.55
Levermen or crane men	.70
Helpers	.50
Hammer runner, heavy	.55
Blacksmiths, heavy fires	.87
Blacksmiths, heavy fires, helpers	.55
Blacksmiths, other fires	.72
Blacksmiths, other fires helpers	.46
Drop forgers	.70
Drop forgers' helpers	.50
Boltmakers	.72½
Boltmakers' helpers	.46
Laborers	.40
Liner forgers	.55
Liner forgers' helpers	.46

Boiler shop:	
Boiler makers	[illegible]
Drillers	[illegible]
Holders on	[illegible]
Rivet heaters	[illegible]
Flanger furnace	[illegible]
Helpers	[illegible]
Slat-furnace men	[illegible]
Flanger heaters	[illegible]
Bolting and liner department:	
Bolters	[illegible]
Liner men	[illegible]
Helpers	[illegible]
Cement department:	
Cementers	[illegible]
Helpers	[illegible]
Chipping and calking department:	
Tank testers	[illegible]
Hand chippers and calkers	[illegible]
Pneumatic chippers and calkers	[illegible]
Packers	[illegible]
Cleaning department:	
Leader	[illegible]
Laborers	[illegible]
Coppersmith department:	
Coppersmiths	[illegible]
Helpers	[illegible]
Drilling and reaming department:	
Drillers	[illegible]
Reamers	[illegible]
Electrical department:	
Electricians first-class	[illegible]
Electricians second-class	[illegible]
Wiremen	[illegible]
Joiners	[illegible]
Machinists first-class	[illegible]
Helpers	[illegible]
Erecting department:	
Leading men	[illegible]
Marine erectors first-class	[illegible]
Marine erectors second-class	[illegible]
Specialist or handy man	[illegible]
Helpers	[illegible]
Fitting-up department	
Fitters, first-class	[illegible]
Fitters, second-class	[illegible]
Regulators, first-class	[illegible]
Regulators, second-class	[illegible]
Helpers	[illegible]
Foundry department:	
Molders and coremakers	[illegible]
Cupola tenders	[illegible]
Helpers	[illegible]
Hand and machine chippers	[illegible]
Laborers	[illegible]
Furnace department:	
Leaders	[illegible]
Firemen and helpers	[illegible]
Strikers	[illegible]
Hull engineering department:	
Marine erectors, first-class [1]	[illegible]
Marine erectors, second-class	[illegible]
Specialists or handy men	[illegible]
Joiners	[illegible]
Helpers	[illegible]

[1] Understood to include machinists, plumbers, and pipefitters.

Joiner department:
- Joiners
- Machine men
- Helpers

Lumber department:
- Machine men
- Helpers

Machine shop:
- Machinists, first-class
- Machinists, second-class
- Specialists or handy men
- Helpers

Material labor department:
- Engineers, locomotive
- Operators, locomotive, cantilever, gantry and other cranes of over 3 tons
- Operators, stiff-legged derricks
- Hoisting and portable firemen
- Locomotive conductors
- Road crane conductors

Mold loft:
- Gang leaders
- Loftsmen, first class
- Loftsmen, second class
- Joiners
- Helpers

Paint department:
- Painters and polishers
- Helpers

Pattern shop:
- Pattern makers
- Laborers

Rigging department:
- Marine leaders
- Marine riggers
- Crane leaders
- Crane gang leaders
- Cranemen
- Erector leaders
- Erectors

Riveting department:
- Rivet testers
- Stage builders
- Hand riveters
- [illegible] riveters

Senator REED. The statement of Mr. Felton, which he made upon the authority of his brother, is to the effect that you had paid excessive wages; if you did pay excessive wages, it was because you were directed to do so by this wage adjustment board, was it?

Mr. KENNEDY. If we did pay excessive wages; yes.

Senator REED. Yes. So that I call the attention of the committee at this time to the fact—without any criticism of Mr. Felton, whom I happen to know and who I think is a very fine gentleman—that that statement that he has just analyzed shows how easily a man can be mistaken about those things that have been charged.

Senator JONES. My recollection is that Mr. Felton said that was based on what his brother told him.

Senator REED. Yes.

Senator HARDING. I want to ask you one question, Mr. Kennedy. Did I understand you correctly to say that there is a variation in the rate of overtime paid?

Mr. KENNEDY. No; but the hours, when it becomes effective—which makes a variation in the rate, of course.

Senator HARDING. That is to say, every craft gets the same rate of overtime pay; that is, the same hour credit. If I can make it clear, you do not pay one craft double time for overtime and pay another craft time and a half for overtime, do you?

Mr. KENNEDY. I explain it better by taking a case as an illustration. This [indicating] is the wage schedule as it is in effect, Senator Harding. For instance, the carpenters provide for 70 cents per hour on the new finding; we were paying them 60 cents.

Senator NELSON. That is the new finding?

Mr. KENNEDY. That is the new finding.

Senator NELSON. That is, 70 cents an hour?

Mr. KENNEDY. Yes. Their agreement in Philadelphia, where they were largely organized and had agreements with the employers, provided for double time from 7 a. m. to 8 a. m., and from 4.30 p. m. until 10 p. m. time-and-a-half; from 10 p. m. until 8 a. m. double time.

Senator HARDING. Before you get away from that, what effect would that have on a three-shift arrangement? Would the men working at the midnight hour get the double time if you were working on three shifts?

Mr. KENNEDY. No; not if they were working on three straight eight-hour shifts.

Senator HARDING. All right; take some other craft for illustration.

Mr. KENNEDY. In the case of the electricians, their double time did not take effect until 12 o'clock midnight, as compared to 10 p. m. for the carpenters.

Senator HARDING. The point I am trying to get at is, what fairness could there be in paying one craft double time and another craft time-and-a-half for the same hours; could there be any fairness in that?

Mr. KENNEDY. That is due only to the fact that they had obtained those agreements in the different crafts individually, without cooperation with one another; those were their own requirements, individually.

Senator REED. And probably the disadvatnage in one case offset to some extent the advantage in some other.

Senator HARDING. What I am aiming at is, here is the Government employing its forces in a public work, and it seems to me that

the same rule of compensation ought to apply to one craft as well as another, and not be limited by the astuteness of a union in making a contractual arrangement.

Senator REED. No; but is this not the case, Senator Harding—not to argue the question, but merely to make a suggestion—that here is a vast body of men; the carpenters have their union, and they have made their own regulations that they want to live by and work under; the electricians have done the same thing, and so on. Now, the Government happens to employ a large number of them; they have been content to work under those rules, and if the Government undertook to set them aside, it would probably get mixed up in a lot of difficulties; and as long as they are contented and do not complain about any inequalities, why should we?

Senator HARDING. Well, I do not consider this a very serious situation in any event.

The CHAIRMAN. They may themselves conclude, after working for a while under one arrangement, that they would like to change it, and if there is no particular objection to it, why not allow them to do it?

Senator CALDER. In answer to an inquiry, you said that this wage scale was retroactive?

Mr. KENNEDY. Yes.

Senator CALDER. Does that mean that these men receive additional back pay for that period?

Mr. KENNEDY. They will have to receive it as soon as the auditors of the Shipping Board come up and tell us exactly how, in detail, we should make this increase.

Senator CALDER. How far back does that retroactive phase of the matter go?

Mr. KENNEDY. As far as our yard is concerned on construction, to January 15, but in certain of the shipyards in the Delaware district they have made it retroactive to November 2, 1917.

Senator CALDER. So the men employed in some of the shipyards will receive additional back pay from November 2?

Mr. KENNEDY. Yes, sir.

Senator CALDER. Until what date?

Mr. KENNEDY. February 14, 1918.

Senator CALDER. Mr. Kennedy, do you think it will be better, in allowing overtime, for this wage adjustment board and for the men generally to agree upon a system that will affect all the crafts?

Mr. KENNEDY. They are doing that in the shipbuilding crafts proper, and that I want to make very plain so that there will be no misapprehension. In shipbuilding proper, as opposed to shipyard construction, they proposed that any overtime conditions should apply to all the crafts; that is, the same conditions will apply to all crafts.

Senator NELSON. That is the sensible method, it seems to me.

Mr. KENNEDY. Those questions have made this particular part of our work rather difficult.

Senator NELSON. When the wage-adjustment board allows the back pay and this percentage of increases, that is added to the amount your company is allowed on the cost?

Senator HARDING. The Government pays all of these bills, Senator

Senator NELSON. The Government pays all of these increases?

Mr. KENNEDY. The Government pays this.

In further answer to the Senator's question, I did not know whether you would be interested or not, but I thought you might ask me the question, and I brought along the rates of pay of men for the week ending January 19, this award being retroactive to January 15. In the sense that that letter is read, I take it that we are charged with paying excessive rates, but if we are paying the going rate in that vicinity with prescribed overtime conditions, and the work is there and the men earn the money, they should not be charged with taking away an excessive amount of money, as I see it. They have been making a large amount of money, as I have understood the term, in wages. I have here a list of over 3,000 men who in that week earned at a rate exceeding $200 per month—wage earners.

Senator NELSON. I have figured out that the carpenters under that schedule, for 10 hours' work, if they worked one hour between 7 and 8 and then an hour in the evening after half past [illegible] could get between $9 and $10 for that 10-hour day's work. Would that not?

Mr. KENNEDY. Yes, sir.

Senator NELSON. An ordinary carpenter would get from [illegible] to $10 a day?

Mr. KENNEDY. Yes, sir.

Senator NELSON. Do you not [illegible]

Mr. KENNEDY. That is pre[illegible]

are getting all over the [illegible]

Senator REED. There has [illegible]

as well recognize it. I [illegible]

going into a [illegible]

layers wanted. $[illegible]

ber that, [illegible]

months a[illegible]

began [illegible]

be avoide[illegible]

get the [illegible]

Mr. KE[illegible]

the Ship[illegible]

excessive [illegible]

which [illegible]

Sena[illegible]

the [illegible]

Mr. K[illegible]

list [illegible]

Sena[illegible]

The [illegible]

in the [illegible]

Mr. K[illegible]

numbe[illegible]

and [illegible]

stand[illegible]

Sena[illegible]

that [illegible]

Mr. K[illegible]

Sena[illegible]

Mr. K[illegible]

date

Senator REED. The recent order made by this wage adjusti board will increase these wages, as they appear in this schedul 20 per cent?

Senator NELSON. No, that increase is included here, as I u stand it, because it was made retroactive.

Mr. KENNEDY. But the money has not been paid, Senator.

Senator NELSON. But you intend to pay it?

Mr. KENNEDY. But it is not listed here, Senator; this is a money paid to the men.

Senator REED. It does not include the 20 per cent increas whatever the increase is?

Mr. KENNEDY. That is correct, Senator.

Senator JONES. So he will receive an additional amount?

Mr. KENNEDY. Yes, sir. But you can not add 20 per ce every one of those figures, because those vary. The average w per cent on the total number.

The CHAIRMAN. You mean he will receive that 20 per cent after, or will that go back?

Mr. KENNEDY. As respects us, the ruling was made retroacti of January 15, 1918. As respects shipyards proper, it was ca back to November 2, 1917.

Senator CALDER (referring to the list just submitted by the wit Mr. Kennedy, I have in my hands here a list of the wages engineers. Does this list indicate in any way the number of of overtime these men worked, or is it just for the straight 10- day?

Mr. KENNEDY. That includes their overtime.

Senator CALDER. Is there any way by which you could giv committee a statement, with these names, of how much ove there was?

Senator HARDING. Probably the official schedule will give official wage of every craft by the hour.

Mr. KENNEDY. By the hour and by the overtime. I will fu you with that to accompany this list.

Senator CALDER. I would like to see that. I see there are engineers here whose weekly pay amounted to $127; others $ week; still others $60 a week. I presume some of these men w overtime and some did not work the full eight hours?

Mr. KENNEDY. Oh, they would have to work eight hours week to draw the money shown there. We simply took off the ber of men who drew at the rate of over $200 a month.

Senator CALDER. I find here the name of one Strickland, earned $60 a week; Billet, $46.50; another, Bliss, $130 for this Is it not possible that the men who received the smaller sums di work a full week?

Mr. KENNEDY. It is; yes, sir.

Senator CALDER. Probable, is it not?

Mr. KENNEDY. Probable; yes, sir.

Senator REED. Those 3,000 names are the names of the hi priced men; they are not presented here as an average of your w

Mr. KENNEDY. No, sir. I want to say that very plainly; I that understood. These are men drawing at a rate of $200 per m and over only.

Senator REED. There is a great number of men who draw u that sum?

Mr. KENNEDY. Oh, yes, sir.

Senator VARDAMAN. What character of work did they perform?

Senator CALDER. They are in the main skilled mechanics?

Mr. KENNEDY. They are all skilled mechanics, engineers, brakemen, commissary department, steam transportation conductors, car checkers, cement finishers, divers, dock builders, electricians, firemen——

Senator REED. That is enough to show the class.

Mr. KENNEDY. They are so-called skilled laborers.

Senator NELSON. Do you allow the men to lay off Saturday afternoons?

Mr. KENNEDY. When we find a man who does that several times, or often enough so we know he is deliberately doing that, we fire him.

Senator NELSON. You do not allow him to lay off Saturday afternoon and get full pay for it?

Mr. KENNEDY. We do not force any man to work Saturday afternoon or Sunday unless he wants to lay off.

Senator NELSON. But suppose he does [illegible] allow him pay?

Mr. KENNEDY. No, indeed; no [illegible]

Senator REED. Does this 20 per cent [illegible] the wage adjustment board [illegible] employees clear up to the salaried [illegible]

Mr. KENNEDY. No [illegible]

Senator REED. But [illegible]

Mr. KENNEDY. That [illegible]

Senator REED. So as a [illegible] the way of wages [illegible] worked on this job from [illegible]

Mr. KENNEDY. No [illegible]

Senator REED. [illegible]

Mr. KENNEDY. Of [illegible] on a salary [illegible] of these men [illegible]

Senator CALDER. [illegible] ago you said that the [illegible] per cent higher than [illegible]

Mr. KENNEDY. [illegible]

Senator CALDER. [illegible] thorized a further increase [illegible]

Mr. KENNEDY. [illegible] they have made [illegible] the shipbuilding [illegible]

Senator [illegible] approximately [illegible]

Senator [illegible] was that in the [illegible] wages [illegible]

Senator [illegible] given.

Senator [illegible] the [illegible] they [illegible] cent [illegible]

Senator CALDER. Thank you. I remember that testimony as being given here, Senator Nelson.

The CHAIRMAN. Mr. Kennedy, proceed with your statement.

Mr. KENNEDY. I should like to explain, so there can be no misapprehension, about the application of these rates at the different times. This [indicating a report of the Shipbuilding Labor Adjustment Board] revised the earnings as testified to and the schedule as in effect at that time.

The CHAIRMAN. That has been inserted in the record.

Mr. KENNEDY. Gentlemen, I wish to make this plain, that I do not bring that report here in a spirit of criticism, or as saying that those wages are excessive, because those are the conditions all over the United States to-day.

Senator NELSON. Not all over; not in all parts of the United States.

Mr. KENNEDY. Not in every individual plant.

Senator NELSON. That may be true of shipbuilding, but not of other employments.

Mr. KENNEDY. You will find those rates of pay, Senator Nelson, effective in the large centers—Chicago, Pittsburgh, San Francisco, St. Louis, and clear across the country to the Pacific coast.

Senator NELSON. But you know where it is a man's fortune to live in a small town where the unions do not run things that rule does not prevail.

Mr. KENNEDY. That is correct, sir.

I testified here in regard to the wages only as to facts as I know them and not as to my own opinions. I would like to say a word about the labor on this job. It would be impossible, and I would be accused of exaggeration, I am afraid, if I testified here as to the conditions as they actually were as I saw them day after day through January and February, when for five weeks we never had the thermometer above freezing, when there was no shelter for these men when they were working in mud and water; where they had to thaw out the frozen ground, or if they were working in the frozen ground they were picking at this earth that was as hard as a rock almost. The weather was, as everybody knows, the most severe we had had in a hundred years up there. I am surprised that the turnover was not greater.

(At this point the hearing was suspended for 10 minutes to permit the members of the committee to respond to a roll call of the Senate.)

The CHAIRMAN. Now, Mr. Kennedy, let us go ahead. Proceed with your statement.

Mr. KENNEDY. I have covered all the departments under my jurisdiction, except one, Mr. Chairman, and that is the fire department. We require three fire stations with 100 men. The chief of the department was formerly a battalion chief of the city of Philadelphia. We have 20 pieces of modern motor-driven apparatus. The risks presented there, with over 100,000,000 feet of lumber in buildings, shipways, docks, and one thing and another, present a terrible hazard, and while, of course, it is insured in the ordinary sense, we felt that we must use special care, because if it were destroyed it would be absolutely irreplaceable in terms of the Government's needs. It might be built up again in four or five months, but as I conceive this thing, as an Amercian, we are fighting this war

in terms of minutes, not in terms of hours, days, or weeks. Every minute has to count.

Mr. Chairman, I am very anxious that there should be no misconception, that I should in no way reflect on the patriotism of labor as a mass on this job, because while you can buy the tangible things, steel, wood, and everything else that goes to make the plant, you can not buy the patriotism of labor; you can not make them work unless they want to work, and they have worked there through all these hardships, and I think that Hog Island as it stands to-day is a monument to the patriotism of the workers through the worst winter we have had in 100 years of our history.

The CHAIRMAN. Mr. Kennedy, have you found the community disposed to cooperate with you? For instance, it would seem as if the location of an immense enterprise like this near a city, no matter whether large or small, would arouse the interest of the community to cooperate in the way of furnishing things you need—light, water, transportation, and things like that. Has there been a real part of cooperation there, or has it been otherwise?

Mr. KENNEDY. The city administration has helped us in every possible way. Every time we have asked them for help they have given it to us—temporary water lines [illegible] protection, assistance in obtaining certain [illegible] from the city lands, and various other [illegible]

Another phase of your [illegible] the community as a [illegible] community has been [illegible]

Senator NELSON. [illegible]

Mr. KENNEDY. We [illegible] line, for sanitary [illegible] we have our own [illegible]

Senator NELSON. [illegible] rates?

Mr. KENNEDY. [illegible]

But as to [illegible] your question [illegible] liar attitude [illegible] not explain [illegible] at this [illegible] some re[illegible] Canal. [illegible] munity [illegible]

The [illegible] been en[illegible] real [illegible]

Mr. [illegible] complain[illegible] have made [illegible]

The [illegible] Is it well [illegible] fierlo[illegible] crowding [illegible]

Mr. [illegible] as I know [illegible] mer. [illegible]

plant that we have with 100, because we do not have the same close supervision; but as I have noted enterprises of like size, I think the job to-day is very efficiently organized and handled and manned.

Senator NELSON. What are they now engaged on principally? Of course, I do not mean shipbuilding proper; not much of that has been done. What is the work now being done there?

Mr. KENNEDY. Completing the railroad installation, completing the rest of the ways, starting in now on the finishing basins, and the piers, and the general finishing up of the program that was originally laid down.

Senator NELSON. Have you got your piles driven?

Mr. KENNEDY. I think in the neighborhood of 70,000 of them are driven.

Senator NELSON. How many more have you to drive, as nearly as you can guess?

Mr. KENNEDY. It would only be my best judgment. I think about 30,000 to 40,000. Not all of those are on the ways, however, Senator, but on the piers and other parts of the work.

Senator NELSON. Have you got your docks and piers all ready?

Mr. KENNEDY. No, sir; they are not scheduled to be ready yet. They will not be needed until the ships are actually launched.

Senator NELSON. And you have about 12 ways ready now?

Mr. KENNEDY. Yes, sir.

Senator HARDING. Mr. Kennedy, when you came in you stated the salary you drew?

Mr. KENNEDY. Yes, sir.

Senator HARDING. Did anybody ask you what you drew before you came to Hog Island?

Mr. KENNEDY. No, sir.

Senator HARDING. May I?

Mr. KENNEDY. I would rather not state what that was, for this reason, Senator Harding: There has been rather an unfair analogy drawn several times—not intentionally, of course. In large commercial enterprises and plants nowadays they pay a man a salary in the sense of a drawing account, and over that they pay him a straight bonus, sometimes a contingent bonus, and sometimes give him stock in the corporation. I told Senator Nelson, in answer to his question that I was here at a distinct financial sacrifice.

Senator HARDING. That was the point I wished to get to.

Mr. KENNEDY. I do not wish to make any point of it or to pose as a martyr in any sense at all. It is less compensation than I receive before I came here.

Senator NELSON. You are getting $15,000 a year?

Mr. KENNEDY. $12,000.

Senator NELSON. And you consider that a sacrifice?

Mr. KENNEDY. I know it is.

Senator HARDING. Is it less than you were receiving?

Mr. KENNEDY. Yes, sir.

The CHAIRMAN. I believe that is all, Mr. Kennedy, unless you have some further statement to make.

Mr. KENNEDY. Not unless there is some question. I would be glad to clear up any question there is.

The CHAIRMAN. We are very much obliged to you.

Mr. KENNEDY. I thank you for your kind attention.

The CHAIRMAN. At this point I should like to insert in the record a letter which bears somewhat on the question of the cost of electric light and water there.

(The letter referred to is here printed in full, as follows:

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
Philadelphia, March 12, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman Committee on Commerce, Washington, D. C.

DEAR SIR: Replying to yours of March 7, addressed to Mr. Piez, regarding cost of electric current and water at Hog Island, the following are the rates at present in force, although no bills have as yet been rendered covering either service.

Electric current for light and power: Delaware County Electric Co. furnish current at 60 cycles, 66,000 volts, alternating current. Contract has not been executed covering this service, but under the terms of the proposed contract the charges are:

Standby or service charge, $15 per annum per kilowatt of maximum demand. Consumption charge, 8 cents per kilowatt hour for all current consumed up to 6,570,000 kilowatt hours per annum and 7 cents per kilowatt hour for all current consumed in excess of 6,570,000 kilowatt hours per annum. A discount of 2½ per cent for cash in 10 days.

There appears to be some question at present as to whether or not these rates will be the final agreed basis of charge for electric service.

Water: Under verbal agreement the city of Philadelphia will furnish not to exceed 300,000 gallons of water daily at approximately 6 cents per thousand gallons, which is the minimum charge made to any consumer. The daily consumption runs up to about 450,000 gallons. This service will be replaced by our own filtered supply later on.

Yours, very truly,

F. T. BOWLES,
Assistant General Manager.

(Thereupon, at 12.30 o'clock p. m., a recess was taken until 2 o'clock p. m.)

AFTER RECESS.

The committee met at 2 o'clock p. m. pursuant to the taking of a recess.

STATEMENT OF MR. WALTER GOODENOUGH, GENERAL MANAGER AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION.

The CHAIRMAN. Please state your name and state what your duties are in connection with the American International Shipbuilding Corporation.

Mr. GOODENOUGH. My name is Walter Goodenough, and I am general manager of the American International Shipbuilding Corporation. Mr. Chairman, if I may, I want to answer every question that is asked of me, but I think we can save time if I go in a logical sequence, and that I will in that way be answering most of the questions that might be propounded.

The CHAIRMAN. That will be satisfactory to the committee. Cover your experience and the development of the work on the ships in particular. I think that will be an orderly way to present it.

Mr. GOODENOUGH. I was born in Flint, Mich., and was graduated as mechanical engineer from the Michigan Agricultural College in 1895.

During my time in college I specialized as far as possible in the ter of marine engineering, epecially construction. Immediately leaving college I started to work in shipyards on the Great Lak

The first year after working in the yards I went to sea o Great Lakes, in order to be certain that I knew what I was desig what I was building, why it was being done. I spent an season partly in passenger vessels as an oiler and partly in or riers as an oiler. I then went to the Atlantic coast, worked in v shipyards, and in a steamship company, became assistant g superintendent of that company, and later became chief draft of a shipyard, where I was designing machinery for torpedo destroyers, yachts, passenger steamers, and tramp steamers. the way, I also went to sea as engineer in the North Atlantic to fu extend my experience. After completing that experience, the building business at that time not promising much, I desired t into large engineering work which would broaden my experience my attention was called to the developments which were going the electrical field. Shortly after that I became connected wit New York Edison Co. as construction superintendent, in char the completion of their new Waterside station, a pioneer stati the large type, and the starting of Waterside No. 2. The pr that we had was not only a pioneering problem in that we putting in very large units, larger than had been done theret but the use of electricity was increasing at that time at a very siderable rate, so much so that each year they had put in fo peak load of that year 30 per cent more capacity than they ha before, and they had to do that about in 10 months.

That was unusually splendid experience, in expeditious work, i proper organization for it, and the proper scheduling of the wo it. After three years of this I wished to further broaden my rience, and in looking about, searching for that place where it s I could best get that experience, I finally was able to get into St Webster. They had built up an enviable reputation for solid a agressiveness and progressiveness, and their work was very d in character and extended all over this country.

I joined Stone & Webster July 1, 1906, and was with them tinuously until September 13, 1917. The first year I was there sent me to Texas to organize a new district known as the s western district. At that time they had a large number of dif jobs running in the Southwest, each running separately, and desired to have them coordinated and brought together so that could be better handled. I remained in Texas until that organi was consummated, smoothed out, and then returned to Bost mechanical engineer. As such I have had charge of all mech engineering matters for Stone & Webster in the very diverse eng ing work which they did.

At Christmas time, 1910, a large steam power station in the c Minneapolis burned down, and I was sent there with instructi build a new one as quickly as possible. The entire design, pur and construction was put up to me.

Senator NELSON. Whose power station was it?

Mr. GOODENOUGH. The Minneapolis General Electric Co.

Senator NELSON. Thank you; go on, please.

Mr. GOODYKOONTZ. A new station was built from the ground up in shorter time than a similar piece of work had ever been done before that I was called in partnership in the work by the late William George Mitchell, constructing manager, and I [illegible] I designed and constructed a power station [illegible] transmission line, [illegible] miles of that being [illegible] tions, and the usual amount of [illegible] operation of that size. The time was short—[illegible] and the work was put into operation [illegible] into full operation—and has been continuously in operation [illegible] This work was of a very varied engineering character, [illegible] large majority of the different branches of engineering [illegible]

All of this required most careful and thorough organization, because the work was scattered over a very great territory. The line between Keokuk and St. Louis was [illegible] miles long. There were at times as many as [illegible] camps with [illegible] men per camp. In addition to that, there was construction of the power station itself at Keokuk.

After finishing that work I returned to Boston as chief mechanical engineer, and later was made chief engineer, which position I held until September 15, 1917.

That sums up my professional experience. My life so far has been spent not only in designing, building and operating steam [illegible] in carrying on very large engineering [illegible] it, in later years, under pressure for time. My experience and [illegible] have been directed solely to these lines.

During the summer of last year I was asked [illegible] problem of manufacturing a large number [illegible] ships of 7,500 tons dead weight capacity [illegible] as stated to me was 20 of such ships. The time stated was that they were to be built in 18 months. [illegible] built in the usual sense that you will build one [illegible] it meant that these ships must be manufactured. The problem was first, how could steel ships be manufactured without taking away from existing facilities? It was simple enough to have enough ways. Practically all the work there is hard work. How, then, were we going to get the material fabricated? Only by using the fabricating capacity of the country—and that capacity had only been used on bridge work, structural work, and tank construction. There was connected at that time with the American International Corporation the New York Shipbuilding Corporation, and I had in my earlier days participated in the design of that plant. That plant was originated by Henry G. Morse, a man who had made in those days a great reputation as a bridgebuilder, and he had started that plant for the purpose of building ships. I will say for the purpose of manufacturing ships. He hoped at the time the plant was started that instead of getting an order for one ship he would get an order for 5 or maybe 10 or 15 ships. The whole plant was laid out on the basis that the ships there would be manufactured, they would not be built in the usual sense.

Now, that involved, as against the usual practice of lifting plates from the hull, that is to say going down to the hull, making a wooden template on the spot where you want the plate, and then taking the one template and putting it on the plate and punching it, in order to

do that work economically it meant the development of mold-loft practice to such an extent that those templates could be lifted from the natural lines laid down on the floor of the mold loft, and when they were so lifted, transferred into wooden templates or patterns, and laid again on the steel plate and marked through at the point where rivets were to be punched, that those plates after punching would go on the ship exactly where intended.

Senator NELSON. Where was that yard?

Mr. GOODENOUGH. At Camden, N. J. That yard has since that time been fabricating between 95 and 98 per cent of all the material that goes into the ship; that is to say, it very seldom lifts a plate from the actual ship itself. Now in that plant the shipways were here [indicating on table], and the fabricating shop was over there [indicating]. The nearest point here was 300 feet, but these men in this fabricating shop did not go out in that yard except curiously, but they did not take plates that they made in there and put them on the ships or go out there and watch while they were being fitted. When their work was finished there it went there [indicating], and another set of men put that material on the ship. Well, why could we not take this fabricating shop, instead of 300 feet away, 300 miles away if there was any benefit to be had by so doing?

Now, I knew also on this matter of detached fabricating shops of a great many structures that had had their parts all fabricated at distant points and then sent to a common point for assembly. For instance, a great many of the automobiles in this country are put together precisely on that basis. Also, submarine chasers; and while I do not suppose this is special knowledge, I think most of us do know that there probably have been submarines themselves built in that same way; but it had never been done for a 7,500-ton ship. Therefore, was it possible, was there any practice to indicate that it was feasible?

I found, on inquiry, that two ships had been built in this way on precisely that principle, except that they had not carried it to the entire ship. They had done the middle body of the ship and it had been preeminently successful. It was startling to see how well that material would fit to the ship, coming from a fabricating shop a long distance away. I found that several other men at the same time were giving their thought to this same problem and had reached the same conclusion that I had as to the physical possibilities. In other words, I knew that ships of which all parts were standardized could be manufactured in many different places and assembled in one other place. But this did not answer the problem completely.

The next question was could it be done fast enough? I wanted to know for certain that this new, old method would save time. I therefore spent some time in the study of the principles of continuous production as applied to manufacturing. Now, we at Stone & Webster had used those principles and that system time after time in construction work. But these ships, if they were to be brought out on time—and mind you we were studying 200 ships, all of one design, it is true—the question was whether these ships could be finished in 18 months. That is an easy thing to say; but we had to know that it could be done. I knew that Henry Ford's production of cars was solely because of complete adherence to the production principle, namely, to the division of the whole into units of few operations, one, if possible.

In this principle, instead of a number of men knowing a whole lot of things, they would know each of them a great deal about some one thing, and by doing that over and over again would become very facile at it, quick, accurate, and would do better work. After discussing this phase of the problem with manufacturing experts I knew in my own mind that the work could be done on time providing that we could get labor and material. When this point was reached it appeared very clear that the ships could be fabricated and assembled and the work could be done on time.

Of course, this involved a most careful elaboration of the design of each individual part and a most careful preparation of working schedules for the manufacture of these parts. There remained the assembling plant, in which the manufactured parts were to be assembled into ships. This did not involve anything unusual in design. It was the ordinary work to which Stone & Webster were accustomed. But it was significant in one thing, namely, its magnitude, coupled with the short time available for construction. That in turn was a common problem, and, as with all such, was a matter of organization.

We have heard a good deal about the word organization, and it is apparently a very difficult thing to define; but I would like to show you by example what it might mean in one particular phase. These ships, the parts placed in hundreds of shops throughout this country, that plate must first be rolled at a rolling mill; somebody must see that it is rolled at a rolling mill, that it is shipped to the fabricating shop; someone must follow it to the fabricating shop, someone must follow it in the fabricating shop to see that the work is done properly, that the size is correct, that the riveting is correct; and then somebody must see that that plate is carried from the fabricating shop to Hog Island. Some one must see that that plate goes to its temporary resting spot in the storage yard, and in the right temporary resting spot. And then, finally, somebody must see that that plate comes from that spot to the ship and the right place in the ship.

Now, that is a series of men, and each of those men has got to fit their work one into another; it involves system. it involves knowledge of the men, it involves knowledge of men in general.

This is only one detail; that one plate is only one detail; but as an example it gives you something of my idea of what organization means—not as a definition, but as a meaning.

Now, what is a fabricated ship? The title, as I undertsand it, as I trace it, comes from the common term applied by structural steel companies to those of their shops in which the steel is punched, cut, and riveted into assembled units. As an example, most of these public buildings in Washington—and I am not at all certain but what this wing of this building—is in that sense a fabricated building. The stone is cut the size and dimension at the quarry, and the quarry may be considered a fabricating shop, and it is then shipped from that quarry to Washington and goes to its place in the building. Therefore if we use these shops it would be fabricated, and it would be erected in our yard. But is this a good ship? Is this a serviceable ship? Will it do all that any ship of a similar size and speed built in the old way will do? What, if anything, has been sacrificed?

In answering that, first, I will say that the American Bureau of Shipping and Lloyds are classing these vessels in the highest class

What are the American Bureau of Shipping and Lloyds? They are classification societies designed for inspecting and supervising the designs of ships in all parts of the world. Upon this inspection and supervision has been determined the rate or the refusal of rate for insurance, for ships in the navigable waters of the globe. They determine the nature of the risk, and whether or not it is a good vessel. Upon the thoroughness and ability of these inspection societies has depended the safety of millions of people and billions of dollars. They permit no detail which would endanger a vessel at sea to escape their eye. They are independent of all private and public concerns, and are largely in shipbuilding a law unto themselves.

That answers the question, is it a good ship and partly answers the question, is it a serviceable ship.

Now, will it do all that a similar ship built in the old way will do? For instance, will it use as little coal? Will it travel through the sea as fast? Let us see those models.

The CHAIRMAN. First, you have to have a standardized ship, do you not?

Mr. GOODENOUGH. I am coming to that. I am coming to just how we pulled that thing apart and made it in that form [exhibiting models of two ships].

Now, we have two ships which we are building for the Government. 50 of these [indicating one model], 7,500 tons, 11½ knots; and 70 of this model [indicating another model], 8,000 tons dead-weight capacity 15 knots.

The CHAIRMAN. When you started out you said your effort was to build 200 ships of standard design, 7,500 tons. Now, that was subsequently changed?

Mr. GOODENOUGH. Yes; that was subsequently changed. At the time of the original contract we received a contract for 50 of these in October, a contract for 70 of these [indicating]. Now, how do we know that that boat here, full size, will go 11½ knots with the power we have got in it; or, to put it another way, how much power will it take to drive this ship at 11½ knots? We have in Washington the Navy experiment station which is probably to-day as fully equipped as any of these stations in the world, and it has there a tank, a long tank. The lines of these ships were transferred to models and were there towed in the tanks and we learned from those experiments that we had such lines that this boat here would take 2,500 shaft horsepower, and this one 6,000 shaft horsepower [indicating], and the lines were such that instead of that amount of power being unusual or large, it was as good as the best for the type of boats of their kind.

I want to make that quite clear, gentlemen, because I think some people have not understood about it—I think there has been an expression about skyscrapers lying on the side, and I have never been able to imagine that that or this either is a skyscraper lying on the side [indicating models]. An old salt would say this was an old tub or a good Bridget, and that one there [indicating model] was a pretty fine lady.

These are your fabricated ships. These are produced in exact facsimile to scale.

The CHAIRMAN. The largest ship seems to be shaped very much like a battleship.

Mr. GOODENOUGH. Yes, Senator Fletcher: that is due to this type of stern [indicating], which is there for a particular purpose, and I am going to show you a little later in connection with this, as a matter of interest.

Now, please bear in mind, gentlemen, that these two boats are safe and serviceable ships; you are not getting freaks, you are not getting ships that can not go to sea and stay at sea and carry the cargoes of the world. The American Bureau and Lloyds guarantee their safety; the Navy tests of the models guarantee their economy. This little boat here [indicating] will carry——

Senator NELSON. That is 7,500 tons?

Mr. GOODENOUGH. Yes, 7,500 tons. This little boat will carry the product of 12,000 acres of wheat at the rate of 20 bushels to the acre.

Now, what are the things which we have done to these ships to make them easier to fabricate, especially by men who have not done this work before, and easier to assemble by men who have not yet done this sort of work? In the first place, you can see it this way if you look at it [handling model], or I will turn it upside down. That is easier [turning the model over]. They are both alike in this respect. The usual ship running from the center or the keel rises up underneath, so that this point here [indicating] would be up in there [indicating], approximately. The usual ship also comes home a little here [indicating], when the ship is built. Now, in these you will notice that is horizontal [indicating], and that is vertical [indicating]. There is just one horizontal line in this world. There is one vertical line in this world—or plumb line. There are not two or three or a dozen—there is just one—and the same way, one horizontal line. But there are as many angles between those two as you like. But if men are to be trained to a horizontal line and to a vertical line and not to have distinguish on anything between that, they are going to get it that much quicker.

You will notice this boat touches all along here on this deck, and that that is parallel [indicating]. The usual ship, if she were laid like this [indicating], would touch at this extreme point here [indicating], and at that extreme point there [indicating], and this [indicating] would be down in here [indicating]. The effect on that line, which is a curved line, they call "sheer." Sheer is put into a vessel for two reasons, mostly on account of appearance, and sometimes on account of what they call floodability. There will be a bulkhead here, and another one here [indicating], two water-tight bulkheads. If this gets punctured, this compartment [indicating], the ship will go down by this end [indicating]. In order, however, to keep her from going down so much that the water will overflow into this other hold, which is not punctured through the hatches or decks, we have got to have enough freeboard left above the new water line so that the water will not flow over there [indicating].

Now, in getting that freeboard you can do it by raising up here [indicating], or you can do it by raising up here [indicating], not putting the curved line in and letting it run straight. Now you get a little more still [indicating].

These boats will effect economy by the utilization of the material at hand, that could be rolled, and will actually weigh perhaps 6 or 7 per cent more than if they were all laid down in the usual fashion. They would, however, take more time to build, because with a curved

sheer here [indicating on model] every moment along there [indicating] the distance from the bottom up here is changing and changing [indicating]. You make a special frame out of every one of those frames, or, as each one of them is different, you have a different length out of each of them, and you are not able to repeat your operation as cleanly and clearly as if they were not there.

A good deal has been said about the appearance of these vessels——

Senator NELSON. If you will allow me a question: Will not a ship of this pattern be apt to roll more in a stormy sea than one constructed according to the old style?

Mr. GOODENOUGH. Not a bit.

Senator NELSON. You don't think so?

Mr. GOODENOUGH. Not a bit; no.

Senator NELSON. Nor will it pitch more?

Mr. GOODENOUGH. Not any more than the regular ship; none whatever.

Now, these ships carry what practically all ships carry nowadays that is, a bilge keel right here along the bilge [indicating on model] from about in there to about here [indicating]. It is nothing but a narrow plate about that long [indicating].

Senator NELSON. It is practically an adoption of old Capt. Lombard's plan?

Mr. GOODENOUGH. I don't know his plan.

Senator NELSON. He is an old Swedish architect. He had a sort of a strip on the side of the ship up from the keel.

Mr. GOODENOUGH. Now, this has been made to scale to show you the appearance of the boat at sea.

The CHAIRMAN. Which one is that?

Mr. GOODENOUGH. That is the one here [indicating].

The CHAIRMAN. The large one?

Mr. GOODENOUGH. The fast boat.

(At this point the witness produced some blue prints.)

This illustrates what I was saying about the straight bottom; the straight sides. The usual ship begins here [indicating], and the bottom runs up about like that [indicating], not quite as much as that, probably [indicating]. That they call dead rise, that distance there, and then it starts up here, and when it gets to that deck it stops there, and that they call "tumble home."

We have made quite a point to see that that is a right angle. There are an infinite number of angles from there to there [indicating]. We made this tank [indicating]. The oil fuel will be carried in there, [indicating]. We have carried this right straight out here to the edge [indicating], and carried this plate up in here [indicating]. When we build that we have a foundation upon which the rest of the ship is built.

Now, there is no merit necessarily in the fact that it is the foundation. The merit is that it is just as good a ship and it permits us to build faster or to build with less skilled labor, or to utilize what the existing facilities are.

Now, the usual practice would be to turn this margin plate down like that [indicating]; that affords a gutter, you might call it, fore and aft of the ship; but we haven't got any gutter there; we put our gutter down here [indicating] at the end of each hold across the ship: made one of those compartments a gutter. It requires a few more

pipes to drain our type of gutter than this [indicating]. We do not call those gutters in ships; we call them the bilges.

Now, our decks across here are perfectly straight. It is usual to camber them—camber them so the water will run off. There never was a ship afloat that probably was more than once upon an absolutely even keel, and most of the time ships are not on even keel. You have a slant to the deck anyway, and the same way fore and aft [indicating].

Through this ship here [indicating] this ship is not built of what they call ship plates, that is the usual ship plates. They have a tensile strength running to 62,000 pounds per square inch, and they are a very mild steel. They have certain elasticity factors about them that permit them to be easily bent, and so on. But this is a time when you can not get that steel in the quantity you need it. So we have taken the steel of which bridges, tanks, and all kinds of commercial land structures are built. It is good for about 55,000 pounds instead of 62,000 pounds to the square inch.

Senator NELSON. Is it not more brittle than the other kind?

Mr. GOODENOUGH. It is slightly more brittle, Senator, and a little greater thickness has to be allowed because of that fact.

Senator NELSON. And it lacks that elasticity, too, does it not?

Mr. GOODENOUGH. A small amount less of that elasticity but not enough to hurt these ships, except a torpedo goes into them—and it is going to burst them anyway; or if they go on the rocks they may crack through a bit easier than if they were made of this other steel.

The deck beams, the frames, are structural steel channels, not ship channels, but structural steel channels. Now, the ship channel nips a little weight off here, and nips a little weight off there [indicating]. But you can not get ship shapes to-day in quantity enough for this development and all the other developments that this country is doing, so you take what you have. That is a structural steel ship all the way through except in this part here [indicating] aft of about a line in there [indicating], and the same thing forward [indicating on model]; and where in that place the frames have to come up around, are made of angles, and having to be flared, in order to keep the inside of it straight across the ship, a flare to meet the surface coming up, you have to have an angle there [indicating] different from the structural angle, one that is not so long and solid in here [indicating], but is a little thinner at that point [indicating] and runs out about here [indicating], so you can bend it without cocking it up like that. Otherwise you could not get it against the plates so tight.

Senator NELSON. It looks to me as though that style was calculated in itself to get more speed for the reason that it gives a better scope for the power of the propeller?

Mr. GOODENOUGH. That is true; that is a 15-knot boat, and this one is a 11½-knot boat, and this is, of course, especially designed to let the water run easily to the propeller, to have as little interference as possible there.

Senator NELSON. To give better scope and efficiency to the propeller?

Mr. GOODENOUGH. Exactly.

Senator RANSDELL. You are going to tell us the relative cost of the two types, are you?

Mr. GOODENOUGH. Of the two types of boat?

Senator RANSDELL. Yes.

Mr. GOODENOUGH. There is of course a difference in cost. This boat here [indicating] will cost in round numbers 50 per cent more.

Senator RANSDELL. Although it has only 500 tons more capacity

Mr. GOODENOUGH. Yes; Senator.

Senator RANSDELL. That is because of greater speed?

Mr. GOODENOUGH. Because of the greater speed; yes.

Now, we were talking about the steel and the type of members that were used in the ship. There is another thing——

The CHAIRMAN. You said you used the structural steel up to a certain point and then changed. What kind do you use from there on?

Mr. GOODENOUGH. Well, that is only in one particular. Let me show it on this longitudinal section. This is a longitudinal section [producing blue print]. Now we are using from about frame No. 20, which is there on this boat [indicating], to the bow, and relatively the same thing here [indicating], an angle instead of a channel section. In other words, if this were the ship here, back here we would have a frame that would be a channel section rolled solid like that [indicating on blue print], but forward of this point here we would have an angle. Now, when we come forward of that little part of the ship, that much of it there, those frame angles, and those frame angles only, are other than structural members. So it is only a little part of the ship that we have put anything that is not structural steel shape.

Now, you have noticed how flat the sides of this boat are. You will notice this is very flat and does not begin to have what we call mold until it gets way forward here [indicating] and way forward here [indicating]. We haven't put any camber in those decks. They are perfectly flat; not only that deck but the next one down there [indicating], that deck, and that and that [indicating], and these decks here [indicating].

Senator NELSON. Is the deck of the ship to be according to the model; that is, a higher deck in the center than the space in front?

Mr. GOODENOUGH. Exactly.

Senator NELSON. That is the style of your deck?

Mr. GOODENOUGH. Yes, sir. I do not think you saw the picture [exhibiting picture].

Senator NELSON. Where is the main hatchway to go down?

Mr. GOODENOUGH. There are hatchways there, there, there, and there [indicating].

Senator NELSON. And none on top?

Mr. GOODENOUGH. Yes; but they are not cargo hatches up here; they are boiler room and engine room hatches. The thing I am speaking about now is another phase of this fabrication, which is very usual in structural steel work, namely, multiple punching. In other words, machine punching, machine spacing. Now, what is multiple punching? Multiple punching, as it is understood, is the rapid, and in some punches simultaneous, punching of more than one hole. But the principle of the thing is that instead of taking a piece of paper or a piece of wood and putting a hole through it here and a hole here [indicating] and then laying it down on a piece of steel and marking through those holes, and then taking the piece of steel over and punching it by working a heavy plate around until

[illegible]

Senator NELSON. [illegible] may seem [illegible] in the plate [illegible]

Mr. GOODENOUGH. [illegible]

Senator NELSON. [illegible]

Mr. GOODENOUGH. [illegible] allowance [illegible] and the American Bureau [illegible] have definite rules as [illegible] the plate [illegible] and other things [illegible]

Senator NELSON. [illegible] bigger margin?

Mr. GOODENOUGH. Exactly.

Senator NELSON. I understand. [illegible] in building steel ships [illegible]

Mr. GOODENOUGH. Almost entirely.

Senator NELSON. It did not use to be so.

Mr. GOODENOUGH. No. In the finer sort of a boat it was not but they have been punching plates for a great many years.

Senator NELSON. Do they do it in the Navy or war ships [illegible]?

Mr. GOODENOUGH. On certain of the plates they do but not all of them.

Now, what is the effect of this machine punching and [illegible]? We have at Hog Island to-day a case where that plate there called A strake, and that plate, called the B strake, and the floor, which is another word for this heavy frame at the bottom, running across it, intersect with holes going through all three members, and when you look up through those holes you would think that they were punched right there in the plates together. Now, that plate came from Montreal, Canada [indicating]; that plate [indicating another plate] came from Sharon, Pa., and that floor came from Joliet, Ill. All of them were punched and fabricated in different shops, and never saw each other or rubbed against each other until they got to Hog Island.

Senator NELSON. Was the steel of equal quality?

Mr. GOODENOUGH. The steel of equal quality? Yes, for all I know it may have come from one mill, but it was fabricated in different places.

That is that phase of ship construction which tends to make for accuracy. There is another matter in which the shipyard [illegible] by

reason of multiple punching, and that is the question of speed o capacity. If we had not done this, were not able to have our ship multiple punched, there would be considerable question as to whethe we could get the ships out in time, because you can imagine, gentl men, a plate—this table is about 20 feet long—the plates on the sid of the ship are 27½ feet long and 6 feet wide. If you had a singl punch punching holes down the edge of this somebody would have t work that plate along under a punch no bigger than that [indicating and if he were single-punching it it would take him a long time t finish punching that plate, and that is where multiple punching i assisting in this program.

Senator NELSON. You have machinery to do the punching then?

Mr. GOODENOUGH. Most of the punching is done at these fabri cating shops throughout the country. We have machinery for it a Hog Island, but it is our idea that the machinery at Hog Island shoul be insurance—that if something fails, something does not come jus so or quick enough, that there we have one place where we ca be sure to get it and not hold up the program.

Senator NELSON. Your idea, then, is to get the fabricated plate the edges that will be fastened together in the yard, assembled in th yard, to have the holes punched, so that all you have to do in th yard is to rivet them; that is your theory?

Mr. GOODENOUGH. Exactly; that is what we are doing. I hav told you there about a fabricated ship; what constitutes a fabricate ship?

Senator NELSON. Now let me ask you this: There are other parts o the ship that you can have fabricated, too, outside of the plates, a there not?

Mr. GOODENOUGH. Oh, yes, indeed; the frames are fabricated.

Senator NELSON. All the frames are fabricated?

Mr. GOODENOUGH. Yes; we are fabricating very close to 100 pe cent of all that hull away from Hog Island.

Senator NELSON. Let me ask you another question. You know those ore boats on Lake Superior have the engine and boilers in th stern?

Mr. GOODENOUGH. Yes, sir.

Senator NELSON. Where have you put them here--amidships?

Mr. GOODENOUGH. Amidships, yes.

Senator NELSON. Both boilers and engines?

Mr. GOODENOUGH. Exactly. Now we know that these ships can b fabricated, but there are a great many thousand pieces of these ship to be put together. How are we going to be sure that they all ge together—not sometimes, but when they ought to get together, and i time so that the ship will not be held up? First we pull the ship a to pieces. Now I want to go through a little of that. I will show you the A design drawings, the contract drawings. [Other blu prints were produced.]

Accompanying the contract were these three drawings [indi cating]. This drawing is of the amidship section, which gives th general strength data. This is a drawing of the general arrangemen of the ship, which gives the outboard elevation and the depth, an this drawing is a drawing of the lines [indicating].

Those are the lines from which these models are made, from whic the ship is being laid down, and from which the models in the experi mental tank were made.

There are the three drawings that came with the contract. That is what we had to start with. That is what the Government, as represented by Mr. Ferris, gave to us start with. Let me have the typical ship's drawings——

The CHAIRMAN. Has there been any change in those since you started?

Mr. GOODENOUGH. There have been changes from time to time, yes; and in some cases quite a few of them.

Senator NELSON. Then these ships you are building are supposed to follow the Ferris plan and not a plan of your own?

Mr. GOODENOUGH. They are following the Ferris plan which we are working out, which we agree with. We know it is a good plan.

Senator NELSON. I mean the original design was his?

Mr. GOODENOUGH. Exactly.

Senator RANSDELL. Right at that point, could you tell us who is the originator or discoverer of the fabricated ship? Is there any one man to whom belongs that credit?

Mr. GOODENOUGH. I do not know, but I think probably the most credit belongs to a Mr. Jack who started in the old Roach yard at Chester, Pa., a few years ago, with the idea of working out a fabricated ship, and I think he had most of the ideas that it [illegible] before he came to this country. I am not certain about that.

Senator RANSDELL. What is his full name?

Mr. GOODENOUGH. I do not know.

Senator RANSDELL. Never mind the [illegible].

Mr. GOODENOUGH. I can get it for you.

Senator RANSDELL. It does not matter.

Senator NELSON. I think there was some testimony given on that the other day.

Mr. GOODENOUGH. These [illegible] are the drawings. These represent the expense of those three drawings in the form which the usual shipyard procures would carry them. In other words the usual shipyard will make with patterns the thing that they are the other, that they have accumulated in building a ship at a time would make about that number of drawings.

Mr. NELSON. These are what you would call the working drawings?

Mr. GOODENOUGH. These are working drawings.

Senator NELSON. From which are patterns are made.

Mr. GOODENOUGH. From which patterns are made, and in some cases not even patterns. Now, I will hand out those others so we can see what they look like. I am talking about continuous production and the comparing of the thing. Here are the drawings [indicating]; over there in the corner are the drawings. In other words these drawings here are pulled to pieces into detailed drawings and it takes six times as many of them, but they are pulled to pieces into detailed drawings so that the structural shop making them will have no difficulty whatever in making them, that they will be reduced to their simplest terms. These are the standard drawings that the usual shipyards would get out.

The CHAIRMAN. They are sent to the fabricating plants.

Mr. GOODENOUGH. Not those. Those are what the old-fashioned shipyard would do, and those over there [addressing his assistant] get some of those hull drawings; one bundle is enough.

Senator HARDING. Do you not send a template to the fabricating plant?

Mr. GOODENOUGH. Yes, both template and plan; but in the case of these drawings [indicating] we do not send a template because the drawing is sufficient. You see the effort there is as far as possible to have something that does not need to be templated, and they can work from the drawings.

Now, there is a detail drawing. There is a bridge deck beam. Of those beams two are to be made for each ship. Of course, you understand that in this sort of construction you can go further. You can not afford to make 1,200 drawings if you are only going to make one ship, but there are 50 like that. This one drawing answers for 100 of these, because there are two of those beams that will fit that condition. That [indicating] is a detail of that beam, and nothing else, reduced to its simplest elements.

Senator NELSON. From that drawing they can make the beams?

Mr. GOODENOUGH. From that drawing they can make the beams and they can not make anything else. They can only just do certain things that are very clearly set forth there.

The CHAIRMAN. Were those drawings prepared by Mr. Ferris?

Mr. GOODENOUGH. Oh, no; the only drawings that Mr. Ferris prepared were those first three that I showed you. That was all. All the rest of them for this one ship—when we finally clean this one ship up there will probably be 1,500 drawings for that, and for the big boat probably about 1,800 drawings, all on this plan.

Senator HARDING. In passing, I am curious to know just what Mr. Ferris did do in that.

Mr. GOODENOUGH. What Mr. Ferris did do? Mr. Ferris did, completely and fully, what any naval architect does. It is a standard. These three plans, Senator Harding, plus a specification indicating his desires as to details, complete his work. Now, it is true it is only three plans, but there is a lot behind those three plans—years of experience, years of study, knowledge about a ship, and all the essential information can be entirely compressed into those three plans, so that a competent shipbuilder can take it up from that point and go on with it.

Senator HARDING. I especially asked that question because we had a controversy here between a New Orleans yard and Mr. Ferris about getting plans, and I wondered why there was such difficulty in having them furnished to the new manufacturer in the South.

Mr. GOODENOUGH. I think if there is any reason for that, Senator Harding, it is simply because the Shipping Board has got, in the matter of these ships, a colossal task. Any body of men who undertook this same kind of work that the Shipping Board is undertaking would have a colossal task. I believe a great many people fail to realize what a tremendous task they have on their hands.

Senator NELSON. Especially when they were not shipbuilders?

Mr. GOODENOUGH. Well, they have some shipbuilders, and some very good ones.

Senator NELSON. Not on the board.

Mr. GOODENOUGH. Now, all of that drawing work, that pulling the thing apart into its elements is to bring it down to its simple elements. The pulling of that thing apart is in itself a pretty big job. It has to be done accurately; it has to be done in the right sequence, in the right time. And under this heading of "continuous production" in manufacture I want to bore you for a minute with an example, in order to make the thing clear.

All of you have looked in the back of your watches and have seen the gear train. Your watch is a train of gears: it is a series of cogs moving into each other, beginning with that connected with the main spring and ending with that which moves the hands. Now the production of these ships, in order that it may be timed and hoped and watched, so that it will come out right, has got to be pretty much a matter of mechanism. Not as delicate or intricate as a watch, but it is still capable of regulation as to speed. [illegible] the gears there is a little back lash, a little [illegible] has got to be in any free gear movement. [illegible] with this one, not with some other.

What is that train of mechanism? [illegible] equivalent of our production schedule. [illegible] First, we have the master schedule [illegible] ships as a whole; that is, the [illegible] Then each ship is broken [illegible] anism is the making of the drawings [illegible] the first of these drawings [illegible] is made the first of the drawings [illegible] next set of drawings [illegible]

And when these [illegible] this side [illegible] contracts [illegible] those things [illegible] interchange [illegible] material [illegible] matter of [illegible] calking [illegible]

What [illegible] chart [illegible] Now, we have [illegible] into [illegible] division [illegible] production [illegible] on this [illegible]

Senator [illegible] ship?

Mr. [illegible] matter [illegible]

Mr. [illegible] this [illegible] next part [illegible]

Now, what [illegible] first keel. The [illegible] to the double [illegible] been through with [illegible] not send them [illegible] know anything [illegible] know how to put [illegible] been done and [illegible] onto the way and [illegible] we let them start [illegible] go here. When [illegible] and they come up [illegible] the same

they have not gone out of the yard. And they continue that production schedule until the number of ships which we have on order for that particular yard is carried through. The same way with each one of them; the same process is carried out in the wet basins, where they are outfitted.

How do we know that is right? How do we know that is of any use at all? Here [exhibiting a blue print] is the hull of a ship, divided into its major operations. Up here is the double bottom. This is the summation for these down to there [indicating].

Senator NELSON. Where is the keel there? Please point that out.

Mr. GOODENOUGH. The keel is included in the inner bottom; it is in this calculation in here, Senator.

Now, we have said, "What will be good, normal, reasonable, possible speed, when your men are trained so that the yard is smoothed out, when the processes are smoothed out and the men know how to do the thing?" That we have set down here. Not, what they could do if they worked to the utmost; not what they could do some days or some weeks, but what they can do at a good rate of speed and keep it up, going all the time. That is this in here [indicating]. We call that 100 per cent.

Now, it would be pretty foolish to start in and lay this first ship and figure on the basis of 100 per cent. Every man has got to be trained. So that first ship is carried along on the basis of 40 per cent, the next one 45 per cent; the next one 50 per cent; 55 per cent; 60 per cent; until when we get over here to this last one it is going at 85 per cent of reasonable, practical perfection.

Behind those charts, and behind all others, we have these schedules which tie the whole thing in and of which I was just speaking.

Of course I might compare this to the assembly and erection of those automobiles in which practically all of the parts are bought from an outside concern and shipped to and assembled in an assembly plant. We can not do this quite like the automobile plant. We can not start our machine on a continuous belt and let it run by the workmen, who have certain things to put on it; but we can, by dividing up properly the operations in the ship, carry the men from one point on the ship to another, and so arrange it that those men will only do those things which they are trained to do and some other men will do other things.

That is another very good thing about it, too. It insures that the men will have steady work. You see, if you were building one ship, when you got through with the double bottom if they did not know how to go on to some other part of it, you would have to lay them off. With this continuous production, providing only you can get material and have the labor, you can keep them steadily busy until the contract is closed up, keep their interest, keep their skill, keep their training, and they themselves will be better off.

Senator NELSON. It seems to me, however, there is a species of cruelty in this system. A man goes through the shipyard and only has an opportunity to know one particular job and is kept in ignorance of all the rest pertaining to the construction of the ship. It is like a man in a boot and shoe factory who goes to work driving pegs or putting the heels on. When he comes out of the shop that is all he knows. Therefore, I say, it seems to me your system appears somewhat cruel to these men.

Mr. GOODENOUGH. Well, in this time we are trying to get ships out, and we have a large contract, and it is going to take a great deal of effort to get them out.

Senator RANSDELL. They will be very perfect workmen in their particular lines, will they not?

Mr. GOODENOUGH. Eventually.

Senator RANSDELL. And capable of drawing pretty high wages, if you continue that sort of work?

Mr. GOODENOUGH. Exactly.

The CHAIRMAN. In other words, each squad specializes?

Mr. GOODENOUGH. Each squad specializes right straight through.

The CHAIRMAN. That is the tendency these days, to specialize?

Mr. GOODENOUGH. That is very much the tendency, Senator.

Now, how do you know we did this right? In the first place, we had gone over this [indicating schedule] with every competent ship man that we could reasonably reach and who could take the time to sit down and go into the details of this. The New York Shipbuilding Co.'s people went into it in detail. We have had some of the most prominent men in the country go through the details of this, one of them only recently. Half of them are certain that this schedule, providing the material is secured, is going to be lived up to. The other half of them are sure it can be done in less time than that. So it is a matter of opinion. It has never been done in just quite this order or sequence. It is a combination of old, tried out methods into one whole.

Senator NELSON. What is your opinion about it? You have given two different opinions; what is yours?

Mr. GOODENOUGH. Mine is this [indicating the schedule], and that is especially my public opinion; my private opinion I will tell you after the meeting, Senator.

Senator NELSON. But you mentioned two views here, one of them that the program could be carried out on time and the other that it could be completed sooner. Now, what is your opinion as to that?

Mr. GOODENOUGH. I think it will be on time, if we get the material.

Senator CALDER. You know, Mr. Goodenough, some of the biggest shipbuilders in the country rather feel that this is too big an undertaking in one place?

Mr. GOODENOUGH. Yes, Senator; and we would be glad to have you talk with some of the big shipbuilders of the country who have gone into this, who do not know of it as it appears in the newspapers, but who have actually gone into it, who have sat down and gone through the thing. I would be very glad to have you ask them what they think.

Senator CALDER. Mr. Powell, of the Bethlehem Co., testified here that it was an undertaking that he did not believe would work out as well as the smaller ones.

Mr. GOODENOUGH. I understand he did, but he has not been through this. Mr. Tynan, of the Union Iron Works, has seen all of this process; in fact, I have tried to have him see it. He has not told me what his opinion of it is, but I would be glad to have you ask him. I would be glad to have you ask Mr. Wood, of the Maryland Steel Co., at Sparrows Point. I think that Mr. French, of Lloyd's, has been through this. There are quite a number, all of whom I do not recall just now.

Senator RANSDELL. I think that Mr. Taylor, of the American Shipping Register, has been through it.

Mr. GOODENOUGH. I do not think Mr. Stevenson Taylor has been through the ship-production detail, and I should be very glad indeed to take him through it.

Senator RANSDELL. I understood you to say, though, that the American Shipping Register had approved these plans.

Mr. GOODENOUGH. Oh, yes; that is, the plan as to the design of the ships. These are plans for production of the ships.

The CHAIRMAN. We will probably get to that a little later.

Senator CALDER. A thing that would cause me a little concern about this is whether you have not got too much system.

Mr. GOODENOUGH. That is a good question. That is a very good question.

Senator CALDER. I have had some experience in construction matters, and I have observed at times that you can go just so far in trying to systematize things, and then you are over your head it swamps you.

Mr. GOODENOUGH. Yes; it blows up.

Senator CALDER. Cost accounting, efficiency experts, economy experts, and all sorts of things—every man has to draw a plan of what he is going to do when he starts in in the morning, and check it up at night. That is what has worried me about the whole idea. Of course, I have not examined into it carefully and do not know, but it seems to be the opinion of a great many men I have talked to that there is that possibility in the whole scheme.

Mr. GOODENOUGH. I know exactly what you are talking about Senator, in the matter of too much system. I have seen the effects of that myself. I think it is something we have been very careful not to overemphasize. A system is of no value unless it serves an end; it is of no value in itself; it is only how you can help yourself with it.

Senator CALDER. How many men are required to keep all of this system up?

Mr. GOODENOUGH. For the whole 50 ways there will be about 300 men. That includes observers and recorders. Other than that, the other men are free from that sort of thing and are attending to the direct work in hand.

Senator CALDER. Does the Government keep any check upon this system outside of the men employed directly by the Shipbuilding Co.?

Mr. GOODENOUGH. Oh, yes; the Government, under Admiral Bowles, in Philadelphia, has Mr. Ferguson, with a corps of assistants. Mr. Ferguson in particular is very familiar with it; he has been through it carefully.

Senator CALDER. Mr. Ferguson of the Newport News Co.?

Mr. GOODENOUGH. No; a brother of that Mr. Ferguson.

The CHAIRMAN. What is his position on the work?

Mr. GOODENOUGH. Mr. W. B. Ferguson is representative of the Emergency Fleet Corporation. I think that is the title. As such he has supervision of all this.

There is one thing which I must speak of, and that is the matter of steel. This must not be taken as a matter of criticism, because it is very evident that everybody in connection with this Government is trying at least to do the best they can, but we are getting our steel

very slowly, and I believe that this committee asked Mr. Robinson, when he was here if there was any one thing that they could do to help this along. The only thing I can suggest is that the steel question be looked into. Maybe there is nothing that can be done. As I understand it, steel for ships is now third in priority. Coal for steel mills is sixth in priority, and you can not make steel without coal. Coal for fabricating shops, if I recall it correctly, is eighteenth in priority, and we can not fabricate steel after we get it unless we have coal to run those shops. I presume that with the coming of spring a good deal of that difficulty will be cleared away.

Senator NELSON. Do you not think that the fact that there has been such a suspension of building operations throughout the country will be of help?

Mr. GOODENOUGH. There is not any doubt about it at all.

Senator NELSON. The demand for structural steel for buildings is falling off to a minimum?

Mr. GOODENOUGH. It is.

Senator NELSON. And that will inure to your benefit, by enabling you to secure steel for the ships?

Mr. GOODENOUGH. There is no doubt about that.

Senator NELSON. And that also inures to the supply of labor?

Mr. GOODENOUGH. It does, Senator. We will be able to get some very good labor on that account.

Senator CALDER. Pardon me a moment. With reference to the question Senator Nelson just asked, did you ever try to utilize the list prepared as a result of the census in New York State a year ago? We had a census taken in our State, and it showed about 70,000 men that were competent to work in shipyards at different trades.

Mr. GOODENOUGH. I think if there were such a census, Senator, we would probably have used it, but I do not know from my own knowledge. I would have to ask Mr. Kennedy if he did get it and use it.

Senator CALDER. I know our State has given that census, the shipbuilding part of it, to the Department of Labor here at Washington the addresses and trades of all these men. I thought I might tell you that, in case you might want to utilize it.

Mr. GOODENOUGH. I am glad to learn of it.

I think, Mr. Chairman, that I have run through the main line of what I had to say. I would be very glad to answer any questions that I can answer.

The CHAIRMAN. Do the orders for supplies come through you, Mr. Goodenough; the orders for the steel for the ships, for instance?

Mr. GOODENOUGH. They do not come through me, no; but an engineer under me will originate them, and a purchasing agent under me will buy them, or will issue orders covering the Government allocation of them.

The CHAIRMAN. Does the Government do the buying?

Mr. GOODENOUGH. The Government has bought all the steel. They say, "Now, you want so many plates, so long and so wide. You buy so many from this mill and so many from that." That is, we issue an order; we do not put a price on it, but we issue the order covering that.

The CHAIRMAN. Who does that?

Mr. GOODENOUGH. The Government takes care of that, Senator.

The CHAIRMAN. Does that extend to other supplies that you need?

Mr. GOODENOUGH. That extends to a great many other things. That was necessary, Senator. If some centralized buying like that had not been provided for, we would all be bidding against each otner, fighting with each other, and so the Government has carried that through to, I should say, at least 75 per cent of the cost of the ships. For instance, turbines are bought of the General Electric Co. by the Government, and the Government found they had to assume a pretty general control over the turbine shop, for marine turbines, in order to be sure that the shipbuilder who was really ready for a turbine would get it and not some fellow who had an order in ahead of it and who was not ready for it; because the net result of that is ships on the sea and not the exact fulfilling of all contracts.

Senator RANSDELL. The Government buys for all the shipyards, I presume. That is, all the yards that are making ships for the Government?

Mr. GOODENOUGH. I think they do; not as fully, perhaps, as they do for us, but in the matter of steel I think the Government is covering practically all of that.

Senator HARDING. Are you familiar, Mr. Goodenough, with the fabricating contracts?

Mr. GOODENOUGH. Yes, sir. Not in detail, but in general I am familiar with them.

Senator HARDING. Let me ask you this question with perfect bluntness, meaning no discourtesy.

Mr. GOODENOUGH. Certainly.

Senator HARDING. There has been an intimation that there have been fabricating contracts given to firms in which somebody in the International was interested, sending the steel a long way to be fabricated in order to accomplish that.

Mr. GOODENOUGH. I would like to answer that. When we started to place contracts for fabricated steel, we found this condition. We found that a great many shops in the East wanted more money for fabrication than we thought they were justified in getting. At that time we had gone barely past the State of Ohio looking for shops—that is, west of the State of Ohio. We then went into the Chicago district and we found some fabricators there who would take the steel at distinctly lower prices than the eastern fabricators were then willing to take it. Now, there is so much of it that even if you got from one concern the lowest price you could not give them all of that business if you wanted to, because they could not possibly finish it in time.

But just the fact of having those prices assisted us greatly in getting back toward the East again where we have the majority of our contracts placed. Those contracts which we placed out West, in spite of the fact of a freight haul there and back, were not at a loss; they were at a gain to the Government of some $5 to $6 a ton over the prevailing prices that we could get from the Eastern fabricators at the time the first of the contracts were let. In other words, the steel delivered at Hog Island at that time was less than we could place it in the East for. That is not true now. The shops in the East have less work, they are less scared of this fabrication of steel material, and they are now bidding in very good shape.

Senator HARDING. Did you go as far west as the Mississippi?

Mr. GOODENOUGH. We went as far west as Minneapolis. We have a contract there and one in Missouri, one in Kansas City, and Milwaukee, and Duluth—I do not carry all of them in my mind.

Senator NELSON. I know you had at Minneapolis and Omaha.

Senator HARDING. Did you consider the Minneapolis and Omaha contracts advantageous?

Mr. GOODENOUGH. They were not only advantageous at the time they were placed, because they helped to bring the eastern price where it belonged, but they are still advantageous.

Senator NELSON. They are so low that even now they measure up to the lowest eastern prices?

Mr. GOODENOUGH. They are low enough now so that they are only slightly more than the lowest eastern prices for the same classes, and not as high as the highest.

Senator NELSON. There is a lesson there. It shows that at one stage they were more patriotic in the West than in the East.

Senator HARDING. There have been rumors of abnormal prices and profiteering in this fabrication. Do you mind telling the committee in percentages what has been the effect of this campaign to bring down the fabricating cost?

Mr. GOODENOUGH. Well, it is going to be a little difficult, perhaps, to prove it all, but I should say that it was in the neighborhood of 20 per cent on the particular items where there was a gain. I will tell you how this came up first, Senator. We had this question raised by the buying agency of the Government for the steel. He said to us: "Why are you sending this steel from these mills here away out there, when you have got to haul it all the way back again, and it takes extra freight to do that?" They went further. They said: "You must do something different." We came to Washington, and they came to Philadelphia, and when they finished they said: "You are right; you are doing it at the lowest cost." Admiral Bowles raised the same question: "Why do you do this?" He had his Mr. Hardwick look into it carefully. I would be glad if you would ask Admiral Bowles what he thinks of it now.

The CHAIRMAN. You used the term "20 per cent." What do you mean by that? That is 20 per cent of what?

Mr. GOODENOUGH. By that I mean not 20 per cent of the total cost of the steel, Senator Fletcher; I mean 20 per cent of the fabricating cost only.

The CHAIRMAN. What 20 per cent?

Mr. GOODENOUGH. For instance, it would amount to something like this: If the eastern people were asking $36 a ton for fabrication, we could get it from the West for $30 a ton for fabrication, and we would still, when we had shipped it back and forth and got it to Hog Island, pay less than the eastern price.

The CHAIRMAN. A saving of 20 per cent?

Mr. GOODENOUGH. Yes.

Senator NELSON. Does not the Government furnish the steel?

Mr. GOODENOUGH. Yes; it furnishes the steel.

Senator NELSON. To the fabricating yards, so that all these people do that have these contracts is to take the steel furnished them by the Government and fabricate it?

Mr. GOODENOUGH. Yes, sir; that is all they do.

Senator NELSON. I was told by a prominent man that that was only cutting out the plates and punching the holes and putting in the rivets, and they are making an enormous profit out of it. What about that? You see there is a kind of wheel within a wheel. The Government furnishes first the material to these yards that do the fabricating, and they furnish it to you again. Is not that the way?

Mr. GOODENOUGH. That is it. I do not know anything at all about their profits. I do not believe that they are making unreasonable profits. All that I can absolutely tell you is to show you the records. We can show you every bid that was taken and where every contract is placed. That is all a matter of record in our files.

Senator NELSON. They are paid by the ton, are they not?

Mr. GOODENOUGH. They are paid by the ton; yes, sir.

Senator NELSON. And what is the price per ton?

Mr. GOODENOUGH. That price will range on the simpler work from, I think around $14, or may be a little less, to as high as $150 for intricate and difficult work, per ton for fabrication.

Senator NELSON. That includes the price of the material?

Mr. GOODENOUGH. No, that does not.

Senator NELSON. That is just the fabricating?

Mr. GOODENOUGH. Yes, sir; the fabricating, Senator.

Senator RANSDELL. What is your system for getting bids for that fabricating from the different plants that are capable of doing the fabricating work?

Mr. GOODENOUGH. We classify the different kinds of steel to be used in the ships into something like 20 different classes. Each of those classes would be comparable—well, everything in a class would carry the same price as it is no more difficult or less difficult. We sent those schedules and the drawings to every fabricator, within reasonable distance, who would consider them, who had shop facilities to consider them. So, Senator, we did not get two or three bids on any one class; we got a great many bids.

Senator RANSDELL. You really went into the open market and got all the bids you could?

Mr. GOODENOUGH. Yes, sir.

Senator RANSDELL. Did you get some even in Canada?

Mr. GOODENOUGH. Yes, sir.

The CHAIRMAN. Went to the lowest bidder?

Mr. GOODENOUGH. Went to the lowest bidder—in this sense: Suppose that these [drawing a diagram] represent bids. Now, any one of those concerns could not handle all of any one class; but supposing those first three could handle all of that class, then the contract was given to those three at the lowest point that we could trade it out with those three. It was not given to these higher bidders down here. That is what I mean by giving it to the lowest bidder. The quantity is so great that the capacity of the shops in a given time could not turn it out in any one case.

The CHAIRMAN. You would have to take into consideration the responsibility of the bidder, too?

Mr. GOODENOUGH. Yes, indeed.

The CHAIRMAN. Do you feel, Mr. Goodenough, that you are up with the work now, or if you are behind, to what extent are you behind?

Mr. GOODENOUGH. Senator, we laid the first keel one week ahead of time. We laid the second keel on time. We are behind in the steel. Now, with the change in the weather with the coming of those hot days there is going to be a decided difference, but there must be a decided difference very soon because we can not do that which we have scheduled unless we get the material and have a change in the way it is coming to us quite shortly.

The CHAIRMAN. Have you assurances to that effect, something that you can rely on?

Mr. GOODENOUGH. We have been working very closely with Admiral Bowles on that for some little time, and I think that he has now been able to make such arrangements here in Washington as will permit of more freedom in that respect. But this is one thing we are up against which the steel mills themselves can not help. For instance, I believe the Navy has the first shot at everything. There is a certain very large plant to be built to do something for the Navy, which requires 6,000 tons of structural steel. Our orders in that mill were set completely aside while they could roll 6,000 tons.

They were working on our orders, but they were set off to one side and stopped entirely while that 6,000 tons was rolled. We found recently in another mill that our orders were set to one side in order to permit the rolling of angles and shapes for aeroplane hangars to be built in France, and we were waiting for those angles. That is one thing that occurred. You see, we might have a member here [drawing a sketch]—it might be a center keelson, and it would have angles on each edge, perhaps a butt strap in here, and stiffeners, and angles down through here. Now, we might have 3,000 tons of the main plate, with this upper angle and this lower angle, in the fabricating shop. But they could not be completed until those angles were received. It is sometimes difficult to get the mills to change their rolls and work on these angles in order that we may get them along.

The CHAIRMAN. Some of that work you can do in the yard, where it is necessary?

Mr. GOODENOUGH. Some of this work here we could do if it got right down to a case of necessity, but if we undertook to do a lot of that I am afraid we would have the yard flooded, because we have not built shops there on the basis of doing too much of that kind of work.

Senator JOHNSON. Mr. Goodenough, how long, please, have you been connected with Stone & Webster?

Mr. GOODENOUGH. Since July 1, 1906.

Senator JOHNSON. Were you, in connection with them, constructing the cantonments at San Antonio?

Mr. GOODENOUGH. No, sir.

Senator JOHNSON. Did you have anything to do with that at all?

Mr. GOODENOUGH. No, sir.

Senator JOHNSON. What particular position with Stone & Webster did you occupy?

Mr. GOODENOUGH. Chief engineer.

Senator JOHNSON. And during the time of construction of the cantonment at San Antonio were you occupying that particular position?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. But were not at any time personally engaged in that construction work?

Mr. GOODENOUGH. No, sir.

Senator JOHNSON. When was it that you first commenced your work at Hog Island? You, personally, I mean.

Mr. GOODENOUGH. I personally began September 15.

Senator JOHNSON. Where are your headquarters, please?

Mr. GOODENOUGH. In Philadelphia.

Senator JOHNSON. At the office in Philadelphia of the American International Co.?

Mr. GOODENOUGH. No; my office is at Hog Island.

Senator JOHNSON. That is what I mean. Your headquarters are at Hog Island, or in the city of Philadelphia?

Mr. GOODENOUGH. No; my headquarters are at Hog Island.

Senator JOHNSON. Do you spend your time there?

Mr. GOODENOUGH. I spend about half of it there and about half of it in Camden, where our engineering and designing and purchasing office is for the ship stuff.

Senator JOHNSON. Have you a particular part of the work that is under your supervision, or do you supervise it generally?

Mr. GOODENOUGH. I am supervising in particular the construction of the ships.

Senator JOHNSON. But specifically, I take it, the technical engineering part?

Mr. GOODENOUGH. The technical engineering part and the direction of the work in the yard on the ships.

Senator JOHNSON. And since you undertook your connection with the American International, that has been your particular field of endeavor, has it not?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. Continuously so?

Mr. GOODENOUGH. Well, when I first started, Senator, I started in this way. First, we had a certain ship to build, and that meant that the yard, the instrument with which that ship was to be manufactured, or the machine by which it was to be manufactured, had to be designed; so that I took a very prominent part in the design of the yard, the starting of it, the organizing of the forces for the yard, and then left to pay more particular attention to the ships.

Senator JOHNSON. Then the first part of the work that you have just described, with reference to the designing of the yard and the like, occupied how much of your time, please? A month, or two, or three, after you became connected with the American International Shipbuilding Corporation?

Mr. GOODENOUGH. During the first part of it, I should say, Senator, the first month, three-quarters on the yard——

Senator JOHNSON. I did not mean that, but as I understood you, you first began to design the yard. Subsequently that was left to others to follow out the particular directions that I assume you gave, and you devoted your energies to the engineering and matters in connection with the construction of ships?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. Now that divided your duties, if you will permit the suggestion, into two particular labors. I wanted to know how long you were engaged, first, in your work specifically concerning the yard?

Mr. GOODENOUGH. You mean from the time I began until I dropped it entirely?

Senator JOHNSON. Yes.

Mr. GOODENOUGH. Well, I do not remember exactly.

Senator JOHNSON. I do not expect exact dates, of course.

Mr. GOODENOUGH. I think it was around four months.

Senator JOHNSON. Do you think it would run from the 15th of September, through October, November, and December, to the 15th of January?

Mr. GOODENOUGH. I think something like that, as nearly as I can recall.

Senator JOHNSON. During that period you were in the yard a great deal, I assume?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. During that period were you the general manager of the construction of the yard?

Mr. GOODENOUGH. During that period, Senator Johnson, I was general manager, but the works manager was directly in charge of construction.

Senator JOHNSON. That was the idea that I had, that your work more particularly was in connection with the ships, while the yard work was done under a works manager, or whatever other official you desired to term him. If that is correct, we will let that stand. Is it? Pardon me; I am not seeking to develop anything else except just the fact as you know it.

Mr. GOODENOUGH. I know; I am trying to answer it. It may be my slant in getting your question just right.

Senator JOHNSON. Possibly the whole fault is in the ambiguity of the question. Let me reframe it. You started on the 15th day of September. You started with certain definite ideas as to what you were going to do. At the time you began, I presume, the predominating part of your work was in connection with the yard for some period, but your specific and particular work is nevertheless the engineering department in reference to the construction of ships and all of the matters pertaining to the ships. How soon after you began your work in relation to the yard was that particular work turned over to a works manager or other official in authority?

Mr. GOODENOUGH. Well, there always was a works manager there, who was working under me at the beginning; and then later on, when I turned all my attention to the shipbuilding, Mr. Muhlfeld took over the yard.

Senator JOHNSON. Who created the so-called organization, in the first place, in reference to the yard?

Mr. GOODENOUGH. In the very first place?

Senator JOHNSON. Yes, sir.

Mr. GOODENOUGH. Why, I directed its formation.

Senator JOHNSON. Who employed the individuals at that time? Who started that organization?

Mr. GOODENOUGH. I employed a good many of them.

Senator JOHNSON. Most of them?

Mr. GOODENOUGH. Why, that is hard to say, Senator; but of course I had to be responsible for most of them.

Senator JOHNSON. What proportion of them did you employ?

Mr. GOODENOUGH. I can not tell you that exactly.

Senator JOHNSON. Who assisted you in the matter of the emplo ment of those who were to build the yard?

Mr. GOODENOUGH. Well, for instance, Mr. Manning, the ch engineer, would employ the most of his assistants. Mr. Carr, t works manager, would employ the most of his assistants. T purchasing agent would employ the most of his assistants.

Senator JOHNSON. And you occupied just a general supervis position in regard to them?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. Who fixed their salaries?

Mr. GOODENOUGH. The important salaries were generally fixed l me, in consultation with Mr. Robinson.

Senator JOHNSON. I ask you about two gentlemen concerni whom I asked Mr. Robinson the other day, and my recollection is th he referred us to you in regard to them; two gentlemen named Harr one of whom was employed, I think, at $10,000 a year——

Senator NELSON. One at $1,000 a month and the other at $625 month.

Senator JOHNSON. Did you employ them?

Mr. GOODENOUGH. I did.

Senator JOHNSON. Personally?

Mr. GOODENOUGH. I employed B. W. Harris personally and agre to the employment of Leo Harris.

Senator JOHNSON. Did you know the gentlemen before their e ployment?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. Had you had dealings with them?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. And did you employ them upon the basis, th is, proportionately, of the compensation they had received befo that time?

Mr. GOODENOUGH. Well, I do not want to answer that in just th way. Will you allow me to answer it in another way, Senator?

Senator JOHNSON. Any way you want to, sir.

Mr. GOODENOUGH. Taking each one by himself: First, what do want to use one of those men for? We had to have somebody handle our material. Now, the handling of the material also includ a stores system, and a stores system that will have to account f many thousand parts—more than thousands. We needed a man w was capable of handling such a system, organizing the details, setti it up so it would work economically and accurately and would ca for the Government's materials.

Senator JOHNSON. And was it because of that that you employ Mr. Harris?

Mr. GOODENOUGH. And it was because Mr. Harris had had the e perience which made us certain that he would be one of the best m we could get in the country to put on that work.

Senator JOHNSON. With all of which I assume you were familia

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. And did you fix his salary?

Mr. GOODENOUGH. I fixed his salary.

Senator JOHNSON. That was the salary of $1,000 a month?

Mr. GOODENOUGH. That was the $1,000 salary.

Senator JOHNSON. And that salary you considered commensura with the salary he had received prior to that time?

Mr. GOODENOUGH. I know—at least I have a statement to this effect, that Mr. Harris will lose by being on this work at least twice what he is being paid for, because of giving up his own business and other work that he was doing.

Senator JOHNSON. I see. And as to the other gentleman named Harris, what have you to say?

Mr. GOODENOUGH. The other gentleman we needed to fill another position there, Senator, and that was to have some man there who would take charge of and care for and account for and maintain all of the equipment that came on the job. Now, I do not mean the equipment that goes into the ships, but I do mean the steam shovels, dump cars, pile drivers, machine tools, pumps. There are today 11,400 and some odd pieces of that kind of equipment upon the job owned by the Government. Now we wanted a man who knew equipment, who knew where it could be secured, where it could be secured at the lowest price, and in a great many instances in the shortest possible time. We took [illegible] Harris for that job because his concern in Minneapolis, the Manufacturers Supply Co., had been in business for a great many years, and he had been brought up and in the business of buying and selling construction equipment, [illegible] ing it, maintaining it, and we would be able to secure the [illegible] $625 per month and very [illegible] to us.

Senator JOHNSON. And would [illegible] the same of that [illegible] salary as you would if the same of the [illegible]

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. That is [illegible] to come for that [illegible]

Mr. GOODENOUGH. [illegible] closed out a business [illegible] could not attend to.

Senator JOHNSON. [illegible] chartered in Minneapolis.

Mr. GOODENOUGH. [illegible] in contact with [illegible]

Senator JOHNSON. [illegible] men named [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible] you or in [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible]

Mr. GOODENOUGH. [illegible] could be if [illegible] a man as [illegible]

Senator JOHNSON. [illegible] see whether [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible] with the business that had been conducted by the Harrises at Minneapolis and you were not aware of the qualifications of the two men?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. And solely because of their qualifications a with a knowledge on your part of the financial loss to them, they we employed?

Mr. GOODENOUGH. I did not know of the financial loss they mig be under at the time I employed them, but I did mean to empl them because of their qualifications.

Senator JOHNSON. And the salaries you deemed then commens rate with the services, or with the earning power of these gentlem before that time?

Mr. GOODENOUGH. Partly that, and partly that the positio themselves if I had tried to fill them with equally qualified m would probably have cost more to fill than with those men.

Senator JOHNSON. And they constituted thereafter a part of t organization, I presume, of Stone & Webster?

Mr. GOODENOUGH. No, sir; they constituted a part of the Americ International Shipbuilding Corporation.

Senator JOHNSON. Yes; but do you not deem them a part of t organization of Stone & Webster that was contributed to this partic lar job?

Mr. GOODENOUGH. Well, in the sense that people whom you ha knowledge of you might consider as parts of your organization; y could look at it that way. But, flatly, it would not be looked at th way.

Senator JOHNSON. Who was the one that first spoke to you co cerning the problem of fabricated ships——

Senator NELSON. Senator Johnson, I have some data that I wou like to put in at this time, if you will allow me, before you go into th other question.

Senator JOHNSON. Yes, sir.

Senator NELSON. This has a bearing on the questions you ha just been asking.

Senator JOHNSON. I was asking Mr. Goodenough the question because I had asked Mr. Robinson and he had referred me to M Goodenough—about the Harrises.

Senator NELSON. I have here several letters from prominent m in Minneapolis that I want to put in the record.

(Senator Nelson read portions of the letters referred to, which a here printed in full, as follows:)

E. T. ABBOTT, CIVIL ENGINEER,
Minneapolis, Minn., February 27, 1918.

Hon. F. B. KELLOGG,
United States Senate.

FRIEND FRANK: Clipping from Minneapolis Journal inclosed. I knew this before to Gillette. As to Leo Harris, he is the son of Abe Harris, of the "Harris Machine Co.," junk dealers at the end of the Washington Avenue Bridge, here in Minneapol In the last years I have had several thousand dollars of business with "Abe" (a squa Hebrew). For the last 40 years I have been an engineer and contractor here Minneapolis, and think I am reasonably well informed as to contractors, enginee etc. If Leo ever had any contracting experience or any other outside of his fathe second-hand shop (they deal in no other—I never heard of it). As to Bernard V Harris, first time I ever heard of him, and I can not find anyone among my engineeri and contracting friends that ever have—there isn't one of this bunch that can co back to Minneapolis and draw down a salary of $100 a month—unless from th relatives.

As to Gillette, who is getting about twice the salary you and Senator Nelson a getting, I see that George M. Gillette here, in interview, says 'tis nobody's busin

[illegible]

[illegible]

[illegible]

to [illegible] the prices and condition of machinery, this is nil. They have t
de[illegible] such men like myself to get the required information.

I [illegible] my patriotic duty, regardless of my interests, to acquaint the Governmen and you as a representative of the facts in the case. There are a great many thin that I can say in regard to this matter. And it seems strange to me when there a hundreds of more competent men right here in our vicinity who are a thousand tim more capable of performing these duties, and would do so if they have opportunit and would sacrific their personal interests for the benefit of the Government, th such men as above secure the positions. If you will investigate these two men pa ticularly, I believe that you will find that I am right.

I do not write this with any spirit of vengeance, but it does make a true American blood boil when he sees such actions going on at a time when we are all trying o best to help the Government in this war, not only in service but with money.

Thanking you kindly for the opportunity to write you, I remain,

Very truly, yours,

J. W. ROSCHE.

Senator JOHNSON. Senator Nelson, those letters mention anothe gentleman that we were inquiring about the other day. [To th witness:] Did you employ Mr. Gillette?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. Did you select him for this particular purpos because of his qualifications?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. You fixed his salary?

Mr. GOODENOUGH. I am going to tell you about that, Senator. W needed to have somebody who understood the fabricating business who knew the plants of the country, who would be able to get goo prices for the Government and place them with proper concerns Now, I looked for that man for quite a while. One gentleman offere to come for three times as much as Mr. Gillette came for. I con sidered when I was able to get a man of his capability that I had bee able to do a very good thing.

Senator JOHNSON. Did you fix his salary?

Mr. GOODENOUGH. His salary was practically fixed in this way He said: "What I will have to give up in order to come here wi amount to this," and it was that amount.

Senator JOHNSON. What amount? Do you remember?

Mr. GOODENOUGH. $15,000.

Senator JOHNSON. And thereupon, when he said what he woul have to give up would amount to $15,000, you fixed it at $15,000

Mr. GOODENOUGH. First I had him interviewed by several other of our people, and we discussed it and decided that was the thin to do.

Senator JOHNSON. Well, as I understand it, you decided upon tha salary? You fixed the salary then, did you not?

Mr. GOODENOUGH. Practically, yes.

Senator JOHNSON. And did you know Mr. Gillette before he cam here?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. How long had you known him?

Mr. GOODENOUGH. Well, in point of years I had known him fo four or five years, but I had not seen very much of him in that time

Senator JOHNSON. Had you known him in any occupation that h was in in Minneapolis?

Mr. GOODENOUGH. This occupation that he was in in Minneapoli

Senator JOHNSON. What was that?

Mr. GOODENOUGH. He was secretary [illegible] the Minneapolis Steel Machinery Co., and their sale manager.

Senator JOHNSON. That is all, Senator Nelson. [illegible] interrupting you, please.

Senator NELSON. Inasmuch as [illegible] some other letters from Minneapolis.

(Senator Nelson read the letter referred to, which has been [illegible] in full, as follows:

[illegible]

Senator KNUTE NELSON,

DEAR SIR AND FRIEND: [illegible] Island crowd. [illegible] the United States that [illegible] place, compared to the prominent [illegible] I am an American. [illegible] all I can. [illegible] hard. And when we are asked [illegible] States people and neighbors as [illegible] $800 to $1,200 a month, the Harris [illegible] my home. They employ [illegible] day for 10 to 12 hours [illegible] as much for one month as he [illegible] steady. And as to the Hon. [illegible] remember the compensation are

There is no set of traitors worse than these so-called men, as Mr. [illegible] the best men he could get in Minneapolis at that [illegible] The Harris Iron Works [illegible] two Louis and Abe Harris while the rest of the men [illegible] to the Government through Louis and Abe [illegible] are doing a fair business. With the distinguished [illegible] our car steel for Government in Milwaukee and yard for Government [illegible] Report got to Steel Machinery [illegible] South Minneapolis. These men [illegible] are not worth more than $10 to $20 a month to every one and I don't think they ever made that much honestly before. I do not like writing this but I can not help saying to one who is trying to stop some of the men who are doing more to help the Kaiser and hinder sales of bonds than all the kaiser in this country. I do not think it would be very safe for these three distinguished men to be seen on the street of their home town just now. Leavenworth is too good a place for them.

Now will stop. Could tell you much more if I could talk to you and I would get a petition with unlimited names congratulating you for your stand. Now, my dear Senator and friend, we want you to stay right where you are and continue as you have. Look to me for what little help I can. But all you have to do is say and accept you as ever.

F. I. BRANT,
[illegible]

Regard from Sam Sweet.

MINNEAPOLIS, MINN., March [illegible], 1919.

Hon. KNUTE NELSON, *Washington, D. C.*

DEAR SIR: Have watched with a great deal of interest the daily newspaper reports in reference to the Hog Island investigation. Here are a few remarks I've heard lately in reference to same.

(On a street car:) "My wife and daughter have been wearing out good high priced shoe leather selling Thrift Stamps. I suppose the money goes to pay the big salaries at Hog Island. I'm going to tell them to quit it."

"If the Government would use the money in buying supplies instead of paying big salaries to some of these Minneapolis men at the shipyards our people would give up their money more willingly."

"Nelson will fix them before he gets through with them."

(In an office:) "What sense is there paying that fellow a thousand dollars a month? He is about 31 years of age and never earned that much money."

(In a home:) "Say, Papa, will they use the money I collect for thrift stamps to pay those men a thousand dollars or more a month?"

"Why don't those fellows who draw such big salaries give it back to the Gov ment instead of asking the poor people to save and buy bonds and thrift stamps?

This is a sample of remarks one hears on the street cars, in the offices, and hor

Sincerely hoping you will accomplish the results you are after, I am,

Very respectfully,

L. E. SESSIONS,
3451 Chicago Avenue, Minneapolis, M

MINNEAPOLIS, MINN., *March 7, 191*

Hon. KNUTE NELSON,
U. S. Senator, Washington, D. C.

DEAR SIR: I notice in the Minneapolis daily papers a report of the Hog Island in tigation conducted by your honor, particularly that part of it relative to the sal paid the Harris brothers, and I wish to state that it has created a very unfavorable pression in the minds of a good many Minneapolis citizens against the Harrises their employer, particularly citizens who have sons in the Army and Navy and gi their best to their country.

The Harris boys are sons of Abe Harris, Minneapolis, who conducted a few y ago a scrap-iron and second-hand machinery business, and who failed, paying creditors about 10 cents on the dollar, and then started up in a similar business u the name of the Manufacturers Supply Co.

They were not considered here of having any particular executive ability and t father used to complain of their inattention to business, claiming they were n interested in auto riding than attending to work. This information was given gentlemen well acquainted with the family, and in view of this common knowle unless they have improved wonderfully lately, the comments here on the enorm salary they are drawing from the Government is decidedly unfavorable to th and they seriously question their patriotism to the country.

It is certainly very discouraging to a lot of us here who are denying ourselves s of the actual necessities, so as to do our bit for our country in these trying times, then read of the large salaries paid to men of mediocre ability, at least so thou here.

They also question very much the statement of the Harris men as to their sacri on account of their absence from their own business.

I personally have taken more Liberty bonds than I really could afford, but all family are denying themselves in our living to help: the children are buying Th Stamps, aiding the Red Cross, and I also have a son in the Army, a volunteer; a can not but feel it is an injustice to us, and others who are doing as much and mor have the money wasted so apparently, money that in some instances entailed actual hardship to the giver.

We are trying to do our bit for our country and most earnestly protest against s apparent favoritism, and can you blame us? I trust your honorable committee correct the abuse.

Yours, very truly,

A. W. KERRIDGE,
3427 Lyndale Avenue

PILLSBURY SETTLEMENT HOUSE,
Minneapolis, Minn., March 4, 191

DEAR SIR: Just a line to let you know that George Gillette, who is working Hog Island Shipyard, knows very little about any business. When he left here the East he took a good steel man with him in order to get by on his job.

I believe most heartily in your stand.

Very truly, yours,

J. C. BATTE

Senator NELSON. There is more on that same subject. I ask have all these letters put into the record.

I thought I would let you people know how the people out Minneapolis and in the West look at these things, where they kn Mr. Gillette and where they know the Harrises fully as well as y do, and let you see how our people feel about it. I wish you co see it from the angle that our people do, and I shall pray to God give you ability to see it from that angle.

Senator JOHNSON. Mr. Goodenough, [illegible] in reference to this first contract, [illegible]

Mr. GOODENOUGH. [illegible] Senator.

Senator JOHNSON. In your statement you said that [illegible] you were approached by someone [illegible] cated ships, and that they [illegible]

Mr. GOODENOUGH. [illegible] body in the office but me to start [illegible]

Senator JOHNSON. It was not a [illegible] to you by someone outside.

Mr. GOODENOUGH. No, sir.

Senator HARDING. Mr. Goodenough, [illegible] correspondence. I want to ask you specifically [illegible] this Mr. Gilbert [illegible]

Mr. GOODENOUGH. He certainly has [illegible] splendidly. Why did you ask [illegible] him?

Senator HARDING. This is all quite new to me. Was he [illegible] only a $125 man?

Mr. GOODENOUGH. I do not know positively what George Gilbert's salary was. Senator Harding, but I do not believe for one single minute that it was less than four times that. I do not know.

Senator NELSON. I want to state to you, Senator Harding, that it appears from the Minneapolis papers that a reporter went to interview him to see what his salary was, and he could not get the information. He told it was not his business what they were paying him up there.

Senator HARDING. I can see how there would be the controversy. What I wanted to get into the record is Mr. Goodenough's statement as to his information about it; that is all. He must stand sponsor and I want to know what he has to say.

Senator JOHNSON. I thought I had developed that pretty thoroughly, but I am delighted to have you develop it further. I agree with you that these gentlemen should be permitted any elaboration.

Senator HARDING. I want to know what you know about the qualifications of the Mr. Harris referred to here.

Mr. GOODENOUGH. Certainly. I have known of that outfit for eight years—not so many; a little over seven years. I have bought stuff from them and I have sold stuff to them. I know the kind of stuff they send on a job. I know the personal standing and personal honesty of them. I know their ability to go and get stuff. I have had to have a lot of stuff and they have got it for me, and they got it at low prices. Even though they sold it to me, they sold it to me at lower prices than I could get it for from other people, and got it to me quicker.

In some of the letters which Senator Nelson has read are some statements which may or may not be true, but I just want to say that it is a fact that B. W. Harris is secretary-treasurer of the Chicago House Wrecking Co., a concern which liquidates plants, takes down plants, sells them, and even constructs them; the concern which took down the Chicago Exposition and sold it; the Buffalo Exposition and sold it; and the St. Louis Exposition and sold it. A man who is conducting a business of that sort, or even if he is not conducting it, whe

handling the bulk of the details of it, is a man who is going to know material; because they have thousands of pieces, greatly diverse pieces, which have to pass their hands, pass through their yards, have to be stored, have to be handled, and have to be sold at a profit.

Senator HARDING. Which one is this?

Mr. GOODENOUGH. It is B. W.

Senator HARDING. This is the one you paid $1,000 a month?

Mr. GOODENOUGH. Yes, sir.

Senator HARDING. How about the other?

Mr. GOODENOUGH. The other one has been in the business with his father. B. W. was at one time in the business with his father. He is now not in the business; he is more in for himself.

Senator HARDING. Was B. W., the wrecker, or the secretary of the wrecking company, or liquidation company—was he the one who sought the job on his own account?

Mr. GOODENOUGH. No; it was the other one, Leo Harris.

Senator HARDING. You sought out this man?

Mr. GOODENOUGH. I sought out B. W. Harris.

Senator HARDING. And you did that because you thought he was the man for the place?

Mr. GOODENOUGH. Yes, sir; for that reason and no other reason.

Senator HARDING. And the other man, you think, has certain qualifications for the task he has assumed?

Mr. GOODENOUGH. The other man has been spending his working life buying equipment at the shops and off of construction jobs, bringing it into his own shop, repairing it, putting it in shape, and selling it at a profit. Now, that is a very large business in this country. It is not junk dealing; it is something that is much needed and much used.

Senator HARDING. I understand that. It has been his business to contract the use of machinery, or to secure the use of machinery to be contracted for in this plant?

Mr. GOODENOUGH. It has been his business to buy the machinery which we used in the construction of this plant.

Senator HARDING. Does the American International, as agents, own these steam shovels and pile drivers?

Mr. GOODENOUGH. They own some of them. The Government owns some of them. Those 11,400 pieces of various equipment are owned by the Government, marked with the Government's name on them.

Senator HARDING. While we are on that particular subject, how do the prices of rental on dredges and steam shovels paid by the American International Shipbuilding Corporation compare with the normal rentals of such machinery?

Mr. GOODENOUGH. I do not know as to that, Senator Harding. I have to ask you to ask that of Mr. Muhlfeld when he comes here. I can not answer that question.

Senator HARDING. Were you impelled to pay abnormal rentals by your eagerness to get machines?

Mr. GOODENOUGH. In order to get that machinery there may have been a necessity for paying a little more than if we had had more time to do the work in, but I am sure that Mr. Muhlfeld can explain that. I do not feel that I am competent to explain it.

Senator HARDING. Now, let me get at another question th arisen in my mind about one of your transactions there. V pass the question of abnormal rentals being paid for those ma We will at least assume that they are a thoroughly compe rental; that will be fair, will it not? In view of that fact, and fact that the subcontractor brings essentially nothing to the j cept himself and the machine which he rents to the corpo do you not think that we are paying a pretty big fee on the contracts?

Mr. GOODENOUGH. I do not. I think that you will find, will investigate it, Senator Harding, that we are paying les almost anybody else for the same kind of service and the sam of rental. Now, I feel pretty certain of that.

Senator HARDING. From your experience as a contractor a operator, would you, in a normal contract, pay the fee wha pay here, or a larger one, and still pay the contractor for the his machinery?

Mr. GOODENOUGH. If, Senator Harding, I could not contrac him at a lump sum, then I would be forced to make the kir contract you are talking of: and at that time I would have to much in the way of rental, and probably quite a little more way of fee; that is really a low fee, Senator.

The CHAIRMAN. Why could you not have done that work yo Mr. Goodenough, instead of hiring the machine and employing body else to do it? Take, for instance, the pile driving, building of the ways: Why could you not have done that and that 5 per cent? That is what is in the minds of a good many

Mr. GOODENOUGH. I know. We could have done that; w have done all that sort of thing. But we wanted, in gettin work along, to attach to ourselves an organization down th organization already existing, which would be, when it was at to us, controlled by us, directed by us, which could come the unit, not piece by piece, as if we had to put it together ours

The CHAIRMAN. Well, what sort of a unit did they bri g, th who had the contract regarding piles, for instance?

Mr. GOODENOUGH. A man who had a contract for driving p say he came from New York—would have pile driving equip which, in the contract, was rented; and he would have beyo foremen, subforemen, straw bosses, and men who had been fol him around for years and know how to work with him and kne to work alongside of him.

Senator HARDING. Well, they go onto the Government pa do they not?

Mr. GOODENOUGH. They do, Senator; but is it not worth som to get a thing as a whole and have it go right to work, rathe to take it all in little by little and have to put it together, pa ularly if speed is a consideration?

Senator HARDING. I quite agree with you. But this is w can not get quite straightened out in my own mind: You pay generous rental for his machinery, and then you take his org tion, which gives you the efficiency; and we pay him out Government funds; and then the man who has the organiz bringing only himself or his firm, gets the fee for doing the Now, it seems to me, unless the abnormal exigency justifies i

that is an extraordinary compensation to pay. I may be about that; I am trying to get light on it.

Mr. GOODENOUGH. Senator, in usual times, under that co and arrangement, the rental is standard, but the fee is abou what is usual in ordinary times; and more generally, it is mor twice what we have paid.

The CHAIRMAN. How do you figure as to the cost to the G ment; Mr. Goodenough, as between the two? Suppose yo attempted to go on yourselves and do this work; do you th would have cost the Government more than to do it the wa did it, or less?

Mr. GOODENOUGH. I think, under the circumstances of ti would certainly have cost the Government more money. I besides doing the work and getting directly to it, we would also had to go to work and put all of these parts together and m into that whole that we were going to attach to us. And th another point that must not be lost sight of in this: We starte job in September. The records of that vicinity indicated c that they had as a rule open winters; absolutely nothing like t

It would certainly pay the Government a great deal better t a machine for a short time and be done with it and have it out way than it would be to buy it and build up the organization, b it costs money to build up the actual men doing the work And this was thought of—all of those things, I am sure, were th of—on the basis of short-time work. Now, if we were going using that kind of equipment for a year, we would not have th of that; we would have bought it; we would have had the ti build up for it.

Senator NELSON. Mr. Goodenough, I have been informed tha of those subcontractors brought there machinery, that the G ment has been paying rental for, in a disabled and incomplet dition, and that the machinery was repaired and put in order expense of the Government, and then they were allowed full as though they had completed it. What have you to say about

Mr. GOODENOUGH. The Government has not done that, no they done that.

Senator NELSON. Has the Government not paid for the rep any of those dredging plants or pile drivers?

Mr. GOODENOUGH. We would have had to pay for bringing pieces of equipment on the job in condition to work properly.

Senator NELSON. No; but if they break down, does not the G ment pay for the repairs, in addition to the rental?

Mr. GOODENOUGH. I can not answer that, but it is in the co somewhere.

Senator NELSON. I have several letters from people up stating that that is the fact. I do not know of my own know

Mr. GOODENOUGH. I can not say it is not true; but I wis would ask that question of Mr. Muhlfeld.

Senator NELSON. I have asked that question once or twice of other witnesses before the committee, but could get no information.

Mr. GOODENOUGH. I will see that you do get that.

The CHAIRMAN. I am not sure whether it is in the record but we have had a call for one of those contracts. I do not r ber whether it has yet been furnished.

Senator JOHNSON. [illegible]

The CHAIRMAN. Yes.

Senator JOHNSON. [illegible] stand, we [illegible] furnished and [illegible]

The CHAIRMAN. [illegible] think it would be worthwhile.

Mr. GOODENOUGH. [illegible]

Senator NELSON. [illegible] whole machinery [illegible] expense of the Government, [illegible] trigger would put [illegible]

Mr. GOODENOUGH. [illegible]

Senator NELSON. [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible] teresting and [illegible] as I observe, [illegible]

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. [illegible] President was the subject [illegible] not?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. I have [illegible] notes, that you have touched upon that subject [illegible] anything that you have to say about it now.

Mr. GOODENOUGH. I shall be very glad to discuss the [illegible] Senator.

Senator JOHNSON. Not [illegible] if you wish [illegible] to go into the subject if you prefer not to [illegible] the opportunity to do so if you desire. [illegible] you yourself to determine.

Mr. GOODENOUGH. I would like to discuss that in an informal manner. It strikes me that the position of general manager [illegible] the questions arising around it [illegible] position worth that money? Is the present incumbent suitable for the position?

Judging from other industrial enterprises and from the amount of work and responsibility to be taken at Hog Island I believe the position is worth at least $25,000 a year. Whether I am suitable to be general manager is for somebody else to say.

Senator JOHNSON. Have you completed what you wish to say upon that subject?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. Your salary with Stone & Webster prior to September 13, 1917, has been testified here to have been $1,000 a month; is that correct?

Mr. GOODENOUGH. Yes, sir; plus.

Senator JOHNSON. Yes; plus. Mr. Robinson said, substantially about $5,000.

Mr. GOODENOUGH. $6,000.

Senator JOHNSON. Your salary on September 13, 1917, when you entered the employment of the Government, was increased from $12,000 a year to $25,000 a year; is that correct?

Mr. GOODENOUGH. Put it in that way, it is correct. My com pensation, however, was at the rate of—salary and bonus at the rat of $18,000 a year.

Senator JOHNSON. Is there any plus about the $25,000 a year?

Mr. GOODENOUGH. Only what I heard Mr. Robinson say in thi meeting.

Senator JOHNSON. Mr. Robinson testified that it was plus exactl the same as it was with Stone & Webster. That is correct, is it not

Mr. GOODENOUGH. That, I understand, is what he said in the meet ing. He did not say that in my recollection, but he said plus $5,00(

Senator JOHNSON. Well, in each instance, I think, he said $5,00(Mr. Goodenough; but it was, at any rate, plus the same bonus i each instance.

Mr. GOODENOUGH. Practically.

Senator JOHNSON. So that the specific sum was $12,000 in the on case and $25,000 in the other, with the like bonus, or substantially the like bonus, in each instance; that is correct, is it not?

Mr. GOODENOUGH. That is practically as I understand it; yes, sir.

Senator JOHNSON. Yes.

Senator NELSON. Are you a member, or have you been a membe of the firm of Stone & Webster?

Mr. GOODENOUGH. No, sir; I am not a member of the firm?

Senator NELSON. Are you a stockholder, either in the Americar International Corporation, or the American International Ship building Corporation?

Mr. GOODENOUGH. No, sir.

Senator NELSON. You are nothing except an employee at a salar and bonus?

Mr. GOODENOUGH. I am an employee.

Senator NELSON. At a salary and bonus?

Mr. GOODENOUGH. Well, salary only.

Senator NELSON. Well, I understand from the answer that yo made to Senator Johnson——

Mr. GOODENOUGH (interposing). The American Internationa Shipbuilding Corporation will not pay that bonus as a part of salary I do not think it was so understood.

Senator NELSON. Well, your salary now is not paid by them it is paid by the Government, is it not?

Mr. GOODENOUGH. The salary part of it is paid by the Government any bonus would have to be paid by them.

Senator NELSON. The bonus comes from them, just as it did before

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. Did you make other increases in salary of th Stone & Webster organization, that you can recall?

Mr. GOODENOUGH. Well, there were a number of men who in on sense had a salary increase; but that was to take care of any extraor dinary expense that they might be obliged to have in moving t Philadelphia, plus what they would naturally get at the first of th year.

Senator JOHNSON. When the subject of fabricated ships was firs suggested to you, about what month was it?

Mr. GOODENOUGH. I think it was the latter part of June, but I can not be sure.

Senator JOHNSON. Your office then was located where, if yo lease?

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible] American International Corporation

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible] without going into [illegible] any of your [illegible] the American International [illegible]

Mr. GOODENOUGH. [illegible] them.

Senator JOHNSON. [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible] suggested [illegible] regard to anything [illegible]

Mr. GOODENOUGH. [illegible]

Senator JOHNSON. [illegible]

Mr. GOODENOUGH. No, sir.

Senator JOHNSON. [illegible] propositions that were submitted?

Mr. GOODENOUGH. No, sir.

Senator JOHNSON. [illegible] tion of the land?

Mr. GOODENOUGH. No, sir.

Senator JOHNSON. Did you come to Washington [illegible] prior to the execution of the contract in reference to [illegible]

Mr. GOODENOUGH. Yes, sir. I came over to talk over [illegible] matters—"could this thing be done?" Or "could that be done?"

Senator JOHNSON. About when?

Mr. GOODENOUGH. It was more nearly things which would be in connection with the specifications. "How would you do the thing if the contract were secured?"

Senator JOHNSON. In reference to ships, or in reference to the yard?

Mr. GOODENOUGH. Ships.

Senator JOHNSON. Ships. About when was it that you came to Washington, please?

Mr. GOODENOUGH. Well, I think, Senator, the latter part of August, but I can not be sure about that, either.

Senator JOHNSON. With whom, if anybody, did you consult—that is, connected with the Government?

Mr. GOODENOUGH. I did not consult with anyone connected with the Government. I simply consulted with our own people as to that phase of the work.

Senator JOHNSON. And what people do you mean, please?

Mr. GOODENOUGH. Mr. Robinson.

Senator JOHNSON. Anybody else?

Mr. GOODENOUGH. Mr. Robinson, Mr. Muhlfeld.

Senator JOHNSON. Mr. Connick?

Mr. GOODENOUGH. Yes; Mr. Connick.

Senator JOHNSON. Anybody else that you recall?

Mr. GOODENOUGH. I think there were several others. Perhaps Mr. Baldwin, although I do not recall; I think he was away at that time—no, I do not think Mr. Baldwin was among them.

Senator JOHNSON. Do you know when the merger—I do not mean legal merger—but when was the combination between Stone & Webster and the American International Corporation first effected?

Mr. GOODENOUGH. I do not know.

Senator JOHNSON. Had you anything to do with that?

Mr. GOODENOUGH. Nothing whatever.

Senator JOHNSON. Who would be in charge of that—Mr. Stone?

Mr. GOODENOUGH. Well, I should think Mr. Stone would know about it. Mr. Robinson would know about it.

Senator JOHNSON. Had you been familiar with the fabricated ships before this particular contract was entered into?

Mr. GOODENOUGH. As familiar as anyone, because none had been built by anyone.

Senator JOHNSON. In listening to the statement that you made, I rather had the impression that the idea was one that came from you gentlemen, or from the American International. Did you wish to convey that impression?

Mr. GOODENOUGH. That the idea came from us?

Senator JOHNSON. Yes.

Mr. GOODENOUGH. No, I do not wish to convey that.

Senator JOHNSON. Is it not a fact that it was an idea or a plan that was conceived by the Shipping Board entirely?

Mr. GOODENOUGH. I do not even know as to that, Senator.

Senator JOHNSON. Do you know whether or not it is a fact that, when they had determined upon the construction of fabricated ships, they asked various people to undertake their construction?

Mr. GOODENOUGH. I do not know.

Senator JOHNSON. When did you open your office at Philadelphia or at Camden, N. J.?

Mr. GOODENOUGH. The office in Philadelphia was practically begun on September 15.

Senator JOHNSON. Did you personally have anything to do with the making of contracts for the construction work in the yard?

Mr. GOODENOUGH. Most of the contracts for the construction work—the subcontractors—were handled by Mr. Muhlfeld.

Senator JOHNSON. Did you supervise these contracts?

Mr. GOODENOUGH. Only in a general way.

Senator JOHNSON. Well, when you say "in a general way," what do you mean?

Mr. GOODENOUGH. Well, I mean that I was kept advised as to how they were coming along.

Senator JOHNSON. That is, reports would be made to you by Mr. Muhlfeld?

Mr. GOODENOUGH. Yes; or I would talk with him and would ask him.

Senator JOHNSON. Did you personally supervise any of these particular contracts upon the ground—that is, in the doing of the work?

Mr. GOODENOUGH. No.

Senator JOHNSON. Do you know what proportion of contracts were sublet?

Mr. GOODENOUGH. What proportion of contracts were sublet? I do not understand you.

Senator JOHNSON. Yes; that question was probably indefinite. What proportion of contracts in the yard construction were sublet?

Mr. GOODENOUGH. Do you mean what proportion of the yard work was sublet to contractors?

Senator JOHNSON. Yes.

Mr. GOODENOUGH. Well, I do not know myself, Senator, but I believe it was somewhere in the neighobrhood of 40 per cent.

Senator JOHNSON. Well, do you say that from the testimony that Mr. Robinson gave here the other day?

Mr. GOODENOUGH. I say that partly from the testimony of Mr. Robinson and partly from discussing it with Mr. Muhlfeld.

Senator JOHNSON. Well, you have said that you did not let those contracts personally; that they were let by Mr. Muhlfeld. Can you furnish a list of the American International Corporation?

Mr. GOODENOUGH. I would have to ask the American International Corporation to get it for me. I have no list.

Senator JOHNSON. I will ask Mr. Baldwin if he can furnish to this committee a list of the stockholders of the American International Corporation and the transferees since May last?

Mr. BALDWIN. Yes; I can get that.

Senator JOHNSON. Thank you. If you would, I would be very much obliged.

(The statement referred to was subsequently submitted by Mr. Baldwin and is here printed in full, as follows:)

Senator JOHNSON (continuing). Who cut the number of ways from 50 to 32 at Hog Island?

Mr. GOODENOUGH. Well, they have not been cut, Senator.

Senator JOHNSON. Were they not reduced?

Mr. GOODENOUGH. No. There was some discussion as to the advisability of not having as large a yard; and we told the Shipping Board that we could postpone 18 of those ways, and would postpone them, but they have since been ordered to be continued in the construction.

Senator JOHNSON. And they are now going on?

Mr. GOODENOUGH. They are now going on; yes, sir.

Senator JOHNSON. The construction of the whole 50 ways?

Mr. GOODENOUGH. The construction of the whole 50; yes, sir.

Senator JOHNSON. There was not an order for eliminating any of them?

Mr. GOODENOUGH. There was no order for elimination.

Senator JOHNSON. And the entire 50 are now being constructed?

Mr. GOODENOUGH. Yes, sir.

Senator JOHNSON. You spoke of the prices of steel, and I want to have an accurate idea in that regard, if you please. The steel that was furnished and fabricated in middle western yards was delivered at Hog Island cheaper than the steel fabricated in yards near by; is that correct?

Mr. GOODENOUGH. The steel which we bought in middle western yards was delivered at a lower price than we could, at first, buy it for in the eastern yards and deliver it there.

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

THURSDAY, MARCH 2, 213.

UNITED STATES SENATE,
COMMITTEE ON [illegible],
WASHINGTON.

The committee met [illegible] in the committee room [illegible] siding.

The CHAIRMAN: [illegible] committee to-day will [illegible] will therefore adjourn [illegible] at which time representatives [illegible] tion will again be heard.

(Thereupon, at [illegible] meet at [illegible] 2 p. m. [illegible]

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

WEDNESDAY, MARCH 20, 1919.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., Hon. Duncan U. Fletcher, presiding.

Present: Senators Fletcher (chairman), Ransdell, Sheppard, Vardaman Nelson, Jones, Harding, Calder, and Johnson.

Senator JOHNSON. May I put into the record at this point, Mr. Chairman, a letter from Mr. Paul Shoup, transmitting a telegram from Mr. Dan Murphy, vice president of the Los Angeles Shipbuilding & Dry Dock Co., relative to the operations and the progress of that company in building ships for the Government? You very kindly had inserted in the record for me recently a statement about the conditions at the Los Angeles plant, but he informs me that I neglected to put in one telegram which he desired to have inserted, and out of courtesy to him I would ask that I may insert this letter and telegram in the record.

The CHAIRMAN. Without objection, that will be done.

(The letter referred to is here printed in full, as follows:)

WASHINGTON, *February 15, 1918.*

Hon. HIRAM W. JOHNSON,
United States Senate.

MY DEAR SIR: The following telegram, received at noon to-day, is self-explanatory:

"Referring to statements Samuel Gompers before Senate committee reflecting on Los Angeles Shipbuilding & Dry Dock Co., please make it known to proper parties that Los Angeles Shipbuilding & Dry Dock Co. had no knowledge whatever and was not in any way connected with employment of parties contingent on buying lots through Hollingsworth agency. Hollingsworth not a director nor has anything to do with management of company. Los Angeles Shipbuilding & Dry Dock Co. organized for sole purpose of assisting Government in building steel vessels. Has made progress satisfactory to Government officials. Has met all demands of labor recommended by representatives Emergency Fleet Corporation. No labor troubles nor any known to be imminent.

"DAN MURPHY, *Vice President.*"

Will you not as Senator from California on this committee kindly extend the courtesy of having Mr. Murphy's message made a part of the record before your committee? I know Mr. Murphy very well, which I presume is accountable for his telegraphing me. He is a man of high standing in our community. His Los Angeles associates on the board of directors are the president of our largest savings bank, the president of our largest national bank and the head of one of our principal manufacturing institutions.

I am suggesting to Mr. Murphy the desirability of having a further detailed statement made by the Los Angeles Shipbuilding & Dry Dock Co. direct to your committee.

Yours, truly,

PAUL SHOUP.

STATEMENT OF MR. GEORGE O. MUHLFELD, VICE PRESIDENT AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, PHILADELPHIA, PA.

The CHAIRMAN. Mr. Muhlfeld, will you state your full name, your age, occupation, and professional qualifications?

Mr. MUHLFELD. My name is George O. Muhlfeld. I am 42 years old. I was born in Indiana and was educated as an engineer at Cornell University, in New York State. After leaving Cornell, I went right out into construction work, with contractors, as timekeeper, foreman, superintendent of buildings, railroad construction, tunnel work, and on various kinds of construction work in the field, working for contractors.

In 1900, while I was living in Seattle, and was in charge of some building work for James C. Spurr, a building contractor there, I realized my ambition to become associated with Stone & Webster, who were doing a large amount of work in the Northwest, and of whom I had heard frequently, on account of their great activities and their superior skill in designing and constructing structures rapidly.

I spent about eight years with them in active charge of various construction work in the field. I was in charge of steam power station work in Seattle; I built a large similar station in Tampa, Fla.; I was in charge of the hydroelectric development on the Puyallup River, near Tacoma, Wash., which was a high-head proposition; we had to build a dam, about 10 miles of flumes, immense power stations, reservoirs, pipe lines, transmission lines, and distribution systems. I did some work in Seattle for Stone & Webster, in connection with the construction of wharves and docks, involving pile driving.

After that I went to Taylors Falls, Minn., for Stone & Webster, and had charge of quite a large hydroelectric development on the St. Croix River, at Taylors Falls. That involved the construction of a large concrete dam, power house, reservoirs, pipe lines, and transmission lines.

About 10 years ago I was called to Boston, to become manager of construction of all of Stone & Webster's construction work. At that time they were doing work in a great many States in the United States.

During the 10 years that I have been with them, I think we have carried on construction work in practically every part of the country, in almost every State. We have had an army of 40,000 men working under us, and I have had charge of the forces in the field. At times we have had as high as 50 or 60 jobs running at one time, each under the charge of a separate superintendent, with his foremen, engineers, and mechanics.

We have done work in Seattle; we have done work in the Sierra Nevada Mountains and the Rocky Mountains; all over Texas, Florida, Georgia, Minnesota—almost every State in the Union, and on almost every branch of construction work.

We have built skyscrapers; we have built industrial plants; we have put in sewer and water-works systems, street car systems, steam railroads, tunnel work, and a great deal of building work.

We have [illegible] our Stone & Webster [illegible] dollars worth of work. [illegible] on all of these jobs [illegible] either on a percentage [illegible] for being arrived at [illegible]

The contracts [illegible] have been very similar [illegible] Emergency Fleet Corporation [illegible] ration for the building [illegible] have had money advanced [illegible] money and accounts [illegible] porting papers [illegible]

The work was always [illegible] construction work [illegible] of our client. Purchases [illegible] and the work was carried [illegible] parts of the work [illegible] special cases we have [illegible] speed required and we [illegible] handle a particular work [illegible] ment of various contractors [illegible] become a part of our [illegible]

All of our work [illegible] the designing and the [illegible] struction went forward [illegible]

People have come to us [illegible] they had to have something [illegible] Buffalo General Electric [illegible] from some power companies at Niagara Falls [illegible] war the Canadian Government [illegible] meant that in the fall [illegible] have a sufficient supply of power. [illegible] design and quality [illegible] stations in the country.

We undertook the work in January [illegible] and we had the first unit—that is, one of the large units [illegible] in November of the same year, about [illegible] months. It was an unprecedented record for work of that character in this country. We specialize on that kind of work.

Last spring Stone & Webster realized the seriousness of the German submarine campaign. We discussed it quite a good deal in Boston. We thought that our organization would be of more value in this emergency by working together as an organization and as a unit than as individuals; and from our knowledge of the shipbuilding industry we felt that our experience in all sorts of construction work would lend itself to fitting us for building ships.

We had heard a good deal about the records being made out in Seattle. They had made some remarkable records out there building steel ships. So Mr. Robinson and I went out there last spring. We visited all the shipbuilding yards in Puget Sound. They were using all sorts of devices out there. They were a long way from the market. They adopted a design of cantilever construction; that

Senator JOHNSON. Yes. How many institutions are you dealing with in fabricated work?

Mr. GOODENOUGH. About 40.

Senator JOHNSON. Did you, or did Stone & Webster, or the American International, so far as you are aware, make any attempt to mobilize those various institutions prior to this contract?

Mr. GOODENOUGH. No, sir.

Senator JOHNSON. Did you have any dealings—that is, was there any endeavor to get in touch with those various plants that manufactured or fabricated the steel prior to the entry——

Mr. GOODENOUGH (interposing). Oh, I see what you mean. I think there was considerable inquiry as to the feasibility of being able to fabricate this stuff before the contract. Now, I did not participate in any of those inquiries, and I am not competent to say just how far it did go.

Senator JOHNSON. Who would be the one to deal with that, please?

Mr. GOODENOUGH. Mr. Connick.

Senator JOHNSON. I think that is all, Mr. Goodenough.

The CHAIRMAN. Are there any other questions?

Senator NELSON. I have none, Mr. Chairman.

The CHAIRMAN. All right, Mr. Goodenough, we are much obliged to you for your statement.

We will not be able to go on to-morrow; but Senator Calder has suggested that we can hear Mr. Ferris next Tuesday; and I understand that next Wednesday will be agreeable to you, Mr. Baldwin, to present your other witnesses?

Mr. BALDWIN. Yes, Mr. Chairman.

The CHAIRMAN. Then we will adjourn until next Tuesday.

(Thereupon, at 5.20 o'clock p. m., the committee adjourned to meet at 2 o'clock p. m., Tuesday, March 19, 1918.)

I tried to visualize the job. [illegible] ing the ways one after another: [illegible] with a big outfit of men. [illegible] long; it meant many [illegible] facilities and equipment. [illegible] ings; and assembling [illegible] their proper places. [illegible] have to be a perfect [illegible] for use in actual [illegible]

Senator VARDAMAN. [illegible] fore beginning the [illegible] say you had all of those [illegible]

Mr. MUHLFELD. [illegible] man.

Senator VARDAMAN. [illegible]

Mr. MUHLFELD. [illegible]

Senator VARDAMAN [illegible]

Mr. MUHLFELD. [illegible] studied the [illegible] the details of [illegible] cable ways [illegible] use hammer- [illegible] thing was [illegible] That was the [illegible] thing we [illegible]

Senator [illegible] it as you said [illegible] detail [illegible] cost the [illegible]

Mr. MUHLFELD [illegible] man [illegible] it: [illegible] would [illegible] although [illegible] stations [illegible] that [illegible] I know [illegible]

Senator VARDAMAN [illegible] without [illegible]

Mr. MUHLFELD [illegible] a little later Senator Vardaman.

Senator VARDAMAN. All right [illegible]

Mr. MUHLFELD. At that time also we [illegible] problems connected with fabricating [illegible] American International people told me that they had [illegible] is known as this Hog Island site they had [illegible] and had had that property in mind in case they [illegible]

Senator VARDAMAN. Who were they? Who were the [illegible] spoke to you?

Mr. MUHLFELD. Mr. Connick told me

Senator VARDAMAN. Who?

Mr. MUHLFELD. Mr. Connick

Senator VARDAMAN. Who were associated with him in that

[redacted]

Senator [illegible]. [illegible] Lane & Rogers under a subcontract?

Mr. MUHLFELD. [illegible] furnish us with their forces. [illegible] pay these forces their wages and salaries.

Senator NELSON. [illegible] would be paid by the government?

Mr. MUHLFELD. Paid by the government. [illegible] all myself as an agent for the government [illegible]

Senator HARDING. Well, sir, [illegible] just took over their forces and [illegible] did not pay Lane & Rogers a fee [illegible]

Mr. MUHLFELD. We took their forces [illegible] myself. We also took over some of their equipment, and [illegible] rental on it, a rental which would repay them the cost.

Senator HARDING. Yes.

Mr. MUHLFELD. We also had them [illegible] for the use of that [illegible].

Senator VARDAMAN. How much?

Mr. MUHLFELD. We paid them a profit of [illegible] per cent [illegible] based on 5 per cent of what we estimated the material and [illegible] the work would cost.

Senator NELSON. It was 5 per cent of your estimates and not of the actual cost, was it not?

Mr. MUHLFELD. Not of the expenditure.

Senator NELSON. Not of the expenditure but of what you estimated it would be?

Mr. MUHLFELD. Yes, sir; if that work has cost less, for instance.

Senator VARDAMAN (interposing). The [illegible] cost less or [illegible] more?

Mr. MUHLFELD. It cost more. But I have had instances of a similar contract where it has cost less, that is why I spoke of that. I have had such instances in our commercial work.

Senator VARDAMAN. At Hog Island?

Mr. MUHLFELD. No; not at Hog Island.

Senator JOHNSON. Who estimated the cost of that work?

Mr. MUHLFELD. It was estimated by the subcontractor and some of our engineers, working on the job together.

Senator NELSON. Now that you know what the work has cost how does that compare with the estimate that was made?

Mr. MUHLFELD. We have not kept detailed estimates of the cost.

Senator NELSON. So you do not know whether the actual cost was above or below the estimate?

Mr. MUHLFELD. We do not know whether it was above or below.

Senator VARDAMAN. How were you able to arrange with these people, then?

Mr. MUHLFELD. Because, in the arrangement that we made with them, they received no more if it cost more than the estimated amount on which their fee is based than if it cost the same amount or less. For instance, take an estimate of $1,000,000 of work. We figured 5 per cent on that; that would be $50,000. There was not any particular contract like this; I am just assuming an amount of work that was estimated to cost $1,000,000, we figured 5 per cent on that.

which would be $50,000. Now, if that work cost $2,000,000, the subcontractor would not get one cent more; if it cost $500,000 he would not get any less.

Senator VARDAMAN. Let me see if I understnad you correctly You took over their machinery and you took over their men?

Mr. MUHLFELD. Yes, sir.

Senator VARDAMAN. And their common laborers and overseers and directors?

Mr. MUHLFELD. We took over their superintendents, their foremen, their general foreman, their experienced track layers, and experienced steam shovel men, and put them on the pay roll of the Government.

Senator VARDAMAN. You put them on the pay roll of the Government at the same rate that the subcontractor was paying them?

Mr. MUHLFELD. At the same rate.

Senator VARDAMAN. You paid the subcontractor, then, for the use of those men that you had employed by the Government, in addition to a fair rental value for his machinery, you gave him a bonus of 5 per cent?

Mr. MUHLFELD. We gave him a rental on his machinery which would return him the actual cost. In some instances, where we made an arrangement with the subcontractor, I think we paid him less than what his actual cost would be.

Senator JOHNSON. What do you mean by "a rental on his machinery that would return to him his actual cost," please?

Mr. MUHLFELD. I have brought one of those subcontracts here with me; and I was going into all of that later on, because I have had an impression that it was not clearly understood by the committee just what had been in regard to those subcontractors. I can go into that now, however, if you would like to have me do so.

Senator JOHNSON. I will not interrupt you further if you will just supply that one thing—what you mean by "a rental which would pay him the actual cost." Do you mean the actual cost of the machinery or equipment?

Mr. MUHLFELD. No; his actual cost.

Senatoe JOHNSON. Well, what do you mean by that?

Mr. MUHLFELD. For instance, his investment in the machinery. He has his money in it.

Senator JOHNSON. Yes.

Mr. MUHLFELD. He is entitled to 5 or 6 per cent return on that investment. He is also entitled to something for the wear and tear on that equipment—for the use of it; it is not going to be in as good condition, or worth as much, after we get through with it as it was when he brought it on the job.

Senator NELSON. But does not the rent cover that?

Mr. MUHLFELD. The rent does cover it.

Senator JOHNSON. Yes; but what I am inquiring is, What is the actual cost that you thus figured into the contract?

Mr. MUHLFELD. Do you mean, how did we arrive at this rental on the equipment?

Senator JOHNSON. Yes. Say there is 5 or 6 per cent, for instance, for the investment.

Mr. MUHLFELD. Yes.

Senator JOHNSON. Well, what it—5 or 6 per cent that you figured on?

Mr. MUHLFELD. We figured it this way, Sena[illegible]
figured that, for equipment of this particular char[illegible]
shovels, or pile driver rigs, or dump cars, and e[illegible]
kind—we take into consideration all the factors [illegible]
it cost that contractor to produce that equipme[illegible]
per cent a month on the value of that equipment.

Senator VARDAMAN. Five per cent a month?

Mr. MUHLFELD. Five per cent a month on [illegible]
equipment returns to him his actual cost; that is [illegible]

Senator NELSON. Well, who makes the estima[illegible]
the equipment?

Mr. MUHLFELD. We appraise it.

Senator VARDAMAN. You appraise it?

Mr. MUHLFELD. Yes, sir.

Senator HARDING. Is it an accepted sta[illegible]
ear would be a fair rental on that equipme[illegible]

Mr. MUHLFELD. Yes; on certain kinds of [illegible]

Senator HARDING. Well, on a steam shov[illegible]

Mr. MUHLFELD. On a steam shovel it w[illegible]
f equipment it would not be enough. W[illegible]
r 12 per cent—not on this job, but we [illegible]
.2 per cent for the use of certain kinds of [illegible]

Senator HARDING. Well, the repairs [illegible]
steam shovel while it was on the job wou[illegible]
of the Government, would they not?

Mr. MUHLFELD. The ordinary repairs w[illegible]
and tear on the equipment has to be a[illegible]

Senator VARDAMAN. Let me get this [illegible]
the rental of this machinery is 5 per cent [illegible]
value of it?

Mr. MUHLFELD. On the value of it.

Senator VARDAMAN. Anything else?

Mr. MUHLFELD. Five per cent of the value [illegible]

Senator VARDAMAN. Nothing else? You [illegible]
amount?

Mr. MUHLFELD. That is all we would pa[illegible]

Senator VARDAMAN. Well, what is the [illegible]
shovels?

Mr. MUHLFELD. That depends on the [illegible]
of it and the capacity of it. Some steam [illegible]
way from $5,000 or $6,000 to $12,000 or [illegible]

Senator JOHNSON. Mr. Muhlfeld, let [illegible]
quiry: Is that the way you figured the [illegible]
which you have referred?

Mr. MUHLFELD. I figured the Bate[illegible]
figured the return to them on their [illegible]
would pay them—this rental for the[illegible]
per cent a month on the value of [illegible]
for only a limited period. For in[illegible]
work was going to last four month[illegible]
it was based on finishing the wo[illegible]
that the equipment used on the[illegible]
nished us by the contractor [illegible]

that it would be used four months on that work. Now, 5 per ce for four months is 20 per cent. So, if the equipment was appraised-

Senator NELSON (interposing). You gave them 5 per cent a mont

Mr. MUHLFELD. We gave them 5 per cent a month; and wh we expected the work to last four months, that would be 5 per ce for four months, which would amount to 20 per cent of the val of that equipment.

Senator NELSON. Then you kept it in repair also for the Go ernment, did you not?

Mr. MUHLFELD. Yes; but excuse me a minute, I wanted to ma that point clear to you.

Senator NELSON. All right.

Mr. MUHLFELD. In renting this equipment, for instance, if we w going to use it on the job for four months, if that was our estima time, we appraised the value of that equipment. And suppose t equipment was worth $100,000; we were going to use it on the j for four months, at 5 per cent a month, which would be 20 per ce of $100,000, or $20,000 which that contractor was to receive fr the Government for the use of his equipment.

If it took him eight months to do that work, or if we used th equipment for eight months, he did not get one cent more for he got just the same rental.

Senator NELSON. But if he used it 20 months at that rate th you allowed him for the equipment, he would be getting back the money that his equipment was worth, according to your estima

Mr. MUHLFELD. Yes; but we did not figure on using it for months. The rate at which we figured this in is the going rate; an in fact, 5 per cent a month is a less rate, on this type of equipme than we have paid in our commercial business.

Senator VARDAMAN. How long will one of those shovels last?

Mr. MUHLFELD. That depends entirely on the amount of work do and the character of the work. If a shovel goes into a rock cut, th is pretty hard on it, and it will not last very long. I have seen shove worn out in six or eight months.

Senator VARDAMAN. Well, that is not the machine; that is on the shovel, is it not?

Mr. MUHLFELD. No; that is the whole machine.

Senator VARDAMAN. The whole machine?

Mr. MUHLFELD. Yes.

Senator VARDAMAN. The engine and the crane, and everythin

Mr. MUHLFELD. Yes, sir. You can repair it continually; it is li the old lady with her sock; she would put in a new heel one year a put in a new toe the next year; she was repairing it all the time. you can keep repairing this steam shovel.

Senator VARDAMAN. And if that repairing is kept up it is about good when it is repaired all over as when you started with it?

Mr. MUHLFELD. Well, I do not mean minor repairs; I mean t complete replacement of parts.

Senator VARDAMAN. Well, the Government pays for those?

Mr. MUHLFELD. No, sir; it does not pay for those; it takes care only ordinary wear and tear.

Senator CALDER. Mr. Muhlfeld, your answer as to the amou paid the subcontractors was clear to me; but I am not sure that y answered in such a way that the record would show the facts clear

Taking the steam shovel as an example, you state that you allowed 5 per cent a month on the value of the shovel?

Mr. MUHLFELD. Yes, sir.

Senator CALDER. And you estimated that it would take four months to do the work?

Mr. MUHLFELD. Yes, sir.

Senator CALDER. And that would mean, on a valuation on the equipment of $100,000, a rental of $20,000?

Mr. MUHLFELD. Yes, sir.

Senator CALDER. But if you were required to keep the shovel eight months, because of delays or other reasons, you only allowed 5 per cent for the four months that you estimated at the beginning that it would take?

Mr. MUHLFELD. That is correct.

Senator CALDER. So that all that you would pay for the eight months would be $20,000?

Mr. MUHLFELD. Yes, sir.

Senator JONES. And if it took only two months to do the work, you would still have to pay $20,000?

Mr. MUHLFELD. That is correct.

Senator JOHNSON. Did you do exactly that in the Bates & Rogers contract of which you were speaking?

Mr. MUHLFELD. That same arrangement was made with them.

Senator JOHNSON. Did you make the arrangement?

Mr. MUHLFELD. I think I did, in the case of the Bates & Rogers contract.

Senator JOHNSON. Who generally computed the contracts, or let them? Did you do that?

Mr. MUHLFELD. I let a good many of them, although I consulted with Mr. McConnell, one of our men, Mr. Manning, Mr. Boyajohn, and quite a number of men; we would all get together and decide; and we would also consult with the contractor.

Senator JOHNSON. I take it for granted that, in the estimates that you made, you exercised great care?

Mr. MUHLFELD. We exercised exceedingly great care in the estimates we made.

Senator JOHNSON. In the estimates you made you exercised your care to the best of your ability, did you not?

Mr. MUHLFELD. We exercised the greatest of our care and ability in estimating on all of this equipment.

Senator JOHNSON. And in any estimate that you made, you also used your best care and ability, did you?

Mr. MUHLFELD. I am speaking now of this equipment.

Senator JOHNSON. I am speaking of any estimate that you might make for your organization.

Mr. MUHLFELD. We exercised just as great care as we had facts on which to determine the estimate.

Senator JOHNSON. Yes.

The CHAIRMAN. Did Bates & Rogers have any other work for you besides this grading?

Mr. MUHLFELD. Yes, sir; the Bates & Rogers Co. had a contract for laying the greater part of the track work, and for building some dirt and timber dikes. Those dikes had to be built so that we would have a place to dispose of the material which was dredged out of the river; they are really impounding basins.

The CHAIRMAN. You may proceed with your statement, Mr Muhlfeld.

Mr. MUHLFELD. I was speaking of making a visit to the Hog Islanc site; and I explained to the Senator how the property looked at tha time. I knew that for the building of this shipbuilding scheme, w would have to be in the vicinity of the seaboard; we would have t have deep water, fresh water, if possible; that was desirable. W had to have ground which was susceptible to easy working; to b in the vicinity of a good labor market; there must be reasonable trans portation facilities, which could be improved. And it seemed to me from my examination, that Hog Island possessed all of these advan tages. And I felt that it was capable of transformation into a splendi shipbuilding machine.

As I said before, we had approached this project from a construc tion man's point of view; and my particular responsibility I knew would be to handle the construction of this yard.

That involved a matter of building steel frames, like buildin construction; getting proper assembling devices for putting the ship together; and the ship itself would be like building construction an tank construction. It would have power machinery and powe plant construction, very similar to what we had put into powe stations. There is nothing mysterious or unusual about the yar of about the building of the ships. There were some special fe tures——

Senator NELSON (interposing). Will you go on now and tell what was the first work you did on this site, and describe how y proceeded from that point?

Mr. MUHLFELD. That is what I am coming to now. I have ju a few notes here, and I am following the order of those notes in makin this statement.

Senator NELSON. All right.

Mr. MUHLFELD. But I just want to say that, in the design of thi way, and the design of this ship, there were not any features that w were not familiar with, except a few features which could be handle by naval experts; and we were cooperating, or were going to cooperat with the New York Shipbuilding Corporation, who had those nava experts. There was not anything unusually difficult about this job except the magnitude of the work, which, of course, becomes increas ingly difficult with the increase of magnitude.

All summer long, while I understood that the American Interna tional Corporation was negotiating for this contract, I was busy lin ing up our construction forces, in case we got the contract. We had, think, over 40 jobs running last summer; that is, Stone & Webste had over 40 jobs running. Those jobs were under my charge. had written out to all these different jobs - -

Senator VARDAMAN (interposing). I was not present when yo began your statement; you are the general manager of Stone & Webster, are you?

Mr. MUHLFELD. I am the manager of construction. I have charg of all the field forces of Stone & Webster.

I looked over all of Stone & Webster's construction jobs. I kne when the different jobs were to be finished, when certain of the me could be released. I went over our long list of names of superin tendents and foremen and engineers, picked out the ones that

[illegible]

all summer [illegible]

[illegible]

[illegible]

[

Senator JOHNSON. Then, I am unable to see why a distinction was made in your case in the matter of receiving a salary from the Government.

Mr. MUHLFELD. I have had general charge of all of Stone & Webster's work. Stone & Webster's forces were used by the American International Shipbuilding Corporation to build this yard, to design the ships, in conjunction with the New York Shipbuilding Corporation.

Senator VARDAMAN. Is it not provided in the contract that for such expert assistance as you render, the Government shall pay?

Mr. MUHLFELD. The Government has never paid anything for my services.

Senator VARDAMAN. Well, do you actually know that?

Mr. MUHLFELD. Positively; they have never paid anything for my services.

Senator VARDAMAN. You are paid by Stone & Webster, are you?

Mr. MUHLFELD. I am paid by Stone & Webster.

Senator VARDAMAN. Well, how about the contract that they entered into, which requires that the Government shall pay twice the amount of salaries of experts furnished by them?

Mr. MUHLFELD. The contract that you refer to was to enable the Government to get the services of special men, special experts. For instance, if there was a particular electrical problem that came up and you wanted to get the services of an expert in that line for just a few days he would not go on to the pay roll and be there regularly; he probably would not be needed long enough; he probably would go on for just a few days. So that the contract was drawn between Stone & Webster and the American International Shipbuilding Corporation covering the charges for the use of those particular experts that came down for, say, a day or two at a time.

In all of our commercial work, some one occasionally will come in and say to us, "I want to get an expert, one of your experts, to go out and do some special work for me—to examine some property or make a special design." They will want to know what we will charge. We will say, "We will charge you three times the pay roll cost of this man, plus his expenses while he is away from home." We do that because, having figured over a long period of years, we found that the actual cost to us of one of those experts is just twice what we pay him. And where we do that on a commercial basis, charging three times the pay-roll cost, one-third of that is the profit.

But in this case the arrangement was made so that the Government would return to us our actual cost without profit.

Senator JOHNSON. I am still unable to see why you would not be entitled, as well as the rest of them, to a salary. But it is a matter of little consequence, so far as that is concerned, and we will dismiss it.

Mr. MUHLFELD. Well, I was one of the executive officers of Stone & Webster, and I am also vice president of the American International Shipbuilding Corporation; and my recollection of the contract is that there is no charge authorized by it for any of the executive officers.

Senator JOHNSON. When did you become vice president of the American International Shipbuilding Corporation?

Mr. MUHLFELD. At the time the American International Shipbuilding Corporation was formed.

Senator JOHNSON. [illegible]

Mr. MUHLFELD. No; [illegible] to the American International [illegible]

Senator JOHNSON. [illegible] connection with the parent corporation.

Mr. MUHLFELD. Yes.

Senator JOHNSON. May [illegible] salary you receive from [illegible]

Mr. MUHLFELD. [illegible] receive is not charged to the government [illegible] salary of $20,000 [illegible] profits of their business.

Senator JOHNSON. [illegible] are under your direction or supervision [illegible]

Mr. MUHLFELD. All the men [illegible] nation are under my supervision.

Senator NELSON. Did [illegible] laborers that they [illegible]

Mr. MUHLFELD. [illegible] brought from all parts [illegible] here, but I think [illegible] there, who have been [illegible] by themselves. [illegible] who have been with [illegible] have been educated [illegible]

Senator NELSON. [illegible]

Mr. MUHLFELD. [illegible] put them in the [illegible]

Senator NELSON. [illegible] were obtained [illegible] Webster & Sons. [illegible]

Mr. MUHLFELD. [illegible] the leading men in this organization.

Senator NELSON. [illegible] that they had [illegible]

Mr. MUHLFELD. [illegible] appeared before the committee.

Senator [illegible]. [illegible] raising a few minutes ago [illegible] be drawing a [illegible] disparagement of Mr. [illegible]

Mr. MUHLFELD. Well, I [illegible] the contract here; I think [illegible] executive officers shall not be charged [illegible]

Senator JOHNSON. That is correct.

Mr. MUHLFELD. And I think I [illegible] tive officer; so that it would not have been a proper thing to charge me in.

Senator JOHNSON. Perhaps you are right in that. I had [illegible] the provisions of the contract, but I think you are accurate in that statement.

Mr. MUHLFELD. Yes, sir. In building up this organization, we could not follow the normal procedure in a job of this size, [illegible] ing that it had to be done in eight months' time. If we had [illegible]

years to do it in, we could have gone in there and built roads, done all the grading, and then the sewer work, and certain of the buildings, and so on; but we had to do a lot of this work simultaneously; different parts of it were going along all at one time.

There has been a good deal of talk about the confusion, and the appearance of confusion, down there. To a layman it might appear as confusion; even to an expert who made a casual examination of it, it might appear that there was a lot of confusion there; it might appear to him as a regular chaos—as a chaotic condition.

But to ourselves, or to our leading men, or to a man who would go down there and study that work for a reasonable time, say two or three weeks, it would appear that all the different parts of that work were coordinated; that all the different parts were necessary; and that all of them were things that the men in charge of those departments knew about and had to do when they did them; that it was all coordinated and planned together.

Senator HARDING. In passing, do you mind telling us whether you recall the testimony of Mr. Felton, regarding idleness and inefficiency at Hog Island?

Mr. MUHLFELD. Yes, I do recall that.

Senator HARDING. Do you care to comment on that report of Mr Felton?

Mr. MUHLFELD. Yes. I was down there and went over the work when Mr. Felton was there; and to my knowledge he was on the job about two hours; in fact, I was right in the dining room with him he spent one hour at that time at his lunch, and one hour out on the job; and part of the time he was out on the job the men were at lunch, having their lunch hour.

Senator VARDAMAN. Were you with him at lunch?

Mr. MUHLFELD. Yes, sir.

Senator VARDAMAN. What did you have for lunch? [Laughter.]

Mr. MUHLFELD. I think it was a pretty good meal, Senator Vardaman; he was not taken into the place where the members of this committee had their lunch; he got a 75-cent meal, instead of a 30-cent meal.

Senator VARDAMAN. Well, were those liquid refreshments? He did not see things double, did he? [Laughter.]

Mr. MUHLFELD. By the report that he made, I should say that he saw a good many men loafing that we never saw loafing. You take a railroad, for instance; suppose you take a railroad track, and you have a number of cars coming along; the men who are working on that track stand away from it until that railroad train goes by. They can not help that; they go back to work just as soon as the train has passed. And Mr. Felton made the claim that he saw 15 or 20 men at Hog Island

Senator NELSON (interposing). Were those men standing aside for him and you, on the same principle that men would stand aside for a railroad train to go by? [Laughter.]

Mr. MUHLFELD. No; they were not standing aside for us; but every day on that job men have to stand aside and get off the track when the trains go by.

Senator VARDAMAN. Do you know Mr. Felton quite well?

Mr. MUHLFELD. No; that is the first time I ever met him.

Senator VARDAMAN. What is his vocation?

Mr. MUHLFELD. I think he has been a railroad man.

Senator HARDING. He is a former railroad manager.

Mr. MUHLFELD. Yes; railroad manager.

Senator VARDAMAN. He is a man of large affairs, is he not?

Mr. MUHLFELD. I do not know very much about him. That was the first time I had ever seen him.

Senator VARDAMAN. My understanding is that he has been a very successful railroad manager and railroad builder; I do not know him personally.

Mr. MUHLFELD. Neither do I; that is the first time I ever saw him. But with all the years of experience I have had in this construction work, I should hesitate to go on any construction job with which I was not familiar and criticise it without making a thorough and careful study of it: I should hesitate to do that with all the experience I have had: it would take me two or three weeks to make such a study on that Hog Island job.

Senator VARDAMAN. I should think that a prudent man would hesitate to express an opinion, unless the thing about which he expressed an opinion was manifest, and so open and above board and unquestionable: I marvel that a man of his large experience should make that statement unless there were some very glaring defects in connection with that work.

Mr. MUHLFELD. As I said, he spent one hour at lunch, and part of the time he was out on the job the men were at their lunch; he may have seen men sitting around there taking their lunch.

Senator VARDAMAN. Well, a man of his experience, with a modicum of his sense, would have known whether [illegible] of the men or not.

Mr. MUHLFELD. He may [illegible] may not have been ea[illegible] full noon hour: they [illegible] they stand around.

The CHAIRMAN. W[illegible] there?

Mr. MUHLFELD. [illegible] party all the [illegible] Hurley was [illegible]

Senator NE[illegible] the men [illegible]

Mr. MUHLFE[illegible] working [illegible]

Senator [illegible]

Mr. MUHLFE[illegible] months. [illegible] we could [illegible]

In figu[illegible] would [illegible] did not [illegible] about [illegible]

The CH[illegible]

Mr. M[illegible] that they [illegible] 45 or 50 to [illegible]

Senator [illegible]

Mr. MUHLFELD. I said that I know now—I did not know how much originally; but I knew it would take 5,000 or 6,000 carloads of piles originally. But I now know that it is going to take about 135,000 piles.

Senator VARDAMAN. How much did you say at first—5,000 or 6,000?

Mr. MUHLFELD. Five or six thousand carloads.

Senator CALDER. How long are those piles, please?

Mr. MUHLFELD. They are anywhere from 40 to 70 feet long; I think we have had some 75 feet.

Senator CALDER. That is for driving down to a hard bottom, is it?

Mr. MUHLFELD. Yes, sir.

Senator CALDER. They are all of wood, of course?

Mr. MUHLFELD. We have used some concrete piles; but the majority of the piles are of wood.

Senator CALDER. Is concrete much more expensive than the wood piles?

Mr. MUHLFELD. It figures out pretty much the same, because you can load the concrete pile, as you probably know, so much heavier than you can a wood pile.

Senator HARDING. Well, they are more durable, are they not—the concrete piles?

Mr. MUHLFELD. Yes; they are more durable, unless you get the wood pile below the water line, and then the wood will last indefinitely—if it is always wet.

Senator VARDAMAN. Where it is always covered with water?

Mr. MUHLFELD. Yes. We had to have on this job some 50 or 60 pile-driving machines; we had to have 25 or 30 locomotives; we had to get 20 or 30 steam shovels—all because this job had to be done quickly. It was a matter of speed; and we have gone at this job all the way through just the same as if an invading army was within a hundred miles of our place, instead of 3,000 miles away. We knew we had to get the ships; we knew we had to get the speed; we had to get the speed in building the yard, and that was the thing that was uppermost in our minds all the way through. We economized wherever we could; but where economy interferred with speed, we went ahead and speeded up the work. We had a regular schedule of ships; we knew when the steel was scheduled to arrive; and we had to have our way and the yard ready when that steel was figured to arrive.

The CHAIRMAN. Did you buy any pile drivers?

Mr. MUHLFELD. We did not buy any pile drivers.

Senator NELSON. You rented them, did you?

Mr. MUHLFELD. We rented them.

The CHAIRMAN. How about the locomotives?

Mr. MUHLFELD. Some of the locomotives we have bought outright, because they will be used all through the shipbuilding operations. But some of the locomotives, what are known as "dinkey" locomotives, on dirt work and other work around the yard, have been rented, because they will be returned before the ships are completed.

We went ahead with this work and lived up to our schedule, regardless of weather conditions.

We have been criticised for driving long piles where short piles would have been sufficient. When we ordered this material—these piles—we ordered it in the way that we wanted it; but it did not

always come just as we needed it; in spite of all of our efforts, sometimes the long piles would come before the short piles. But the work had to go ahead, so we drove those long piles, even though shorter piles would have done, in some cases.

But there was not any waste in that. Those piles were cut off, and they are being used for shoring up under the ship. There is not anything that is being wasted there. I think it is figured that in the actual building of the ship, it takes about 27,000 board feet of so-called "dunnage," that is, wedges, blockages, and cribbing of every kind; so that anything that was cut off of those piles was not wasted.

We have been criticized for another thing. I will show you a photograph of some of those piles [handing photograph to members of committee]. We have been criticized for not excavating the ground to its final depth before driving the piles. All of our shovel equipment, all that we had on the job, was very busy in very important places; we could not wait for all of our excavating machinery to come; we had to live up to our schedule; so we drove these piles with the idea that, after the piles were driven, we could use one of the "hydraulic giants," with which Senator Johnson is probably familiar, as they are used out in California for sluicing dirt; it sluices out the dirt from between the piles. It is the cheapest method of excavation; but before we could get to that place to excavate this material we had those unusual winter conditions, which shut down on us and froze it up. We could not wait until it thawed; we had to have those ways ready; so we got in there and steamed it and blasted it, and used every method that the experienced man knows in excavating frozen dirt.

Senator JONES. Let me ask you at this point why you wanted the dirt excavated out there among those piles?

Mr. MUHLFELD. Because the way goes down on a slant.

Senator JONES. And then you would saw off the piling?

Mr. MUHLFELD. Yes, sir, we would saw off the piling, and put on the ways.

Senator JONES. I see.

Mr. MUHLFELD. We had to drive piles through frozen ground. That is a very expensive way; but we had to have speed on this job, and we had to get it done. We blasted out holes in some places, and we put on steam jets, in order to get that piling started through the frozen ground.

Speaking of pile drivers, I think it has been brought out several times before this committee that certain pile driving equipment was brought on the job, and the leads were lengthened out at the expense of the Government, and that the contractor had put his sign on them; that he had tacked up his name on some of those pile drivers.

When we made those contracts for the use of certain of the contractors' equipment, it was specified in the contract how long the leads of the pile driver of the contractor should be. The contractor, for instance, would agree to furnish two or three with a 60-foot lead; some with a 70-foot lead and some with a 40-foot lead. That was all based on our knowledge of the soil conditions as far as it went at that time; and it was based on the lengths of piles, which we had determined from our knowledge of those soil conditions. We had not had time to explore carefully.

When these pile drivers came on the job, we had to lengthen out the leads. That was understood with the contractor; I talked with several of them about it myself; it was all contemplated, as if I would say, "You are to furnish us, Mr. Contractor, a pile driver with a certain length of lead. Now, if we have to make any change in that, the Government will have to pay for it." That is a perfectly reasonable thing and a thing that we have done repeatedly on all of our work.

It has also been brought up in the hearings before this committee that the contractor has built certain equipment on the job, with Government money, and that he has put his sign, or the name of his contracting firm, on that equipment.

Senator NELSON. And got rent for it?

Mr. MUHLFELD. Yes. Now, Senator Nelson, I think you brought that question up.

Senator NELSON. Yes.

Mr. MUHLFELD. In one of the contracts, the contract for the building of the piers and wet basins, it states that the contractor is to furnish, for a fixed rental, a certain amount of equipment; but if he happens to have built some of that equipment on the job—for instance, if it is lost in transit, which happened in one case; this particular contractor lost a dredge right off Atlantic City, N. J.; it went down, and he had to build a new one—where that equipment did not arrive on the job, and had to be built on the job, as I said, the contractor had the option of getting us to build that equipment, to furnish the material and labor and charge it to him, which has been done.

Senator NELSON. In all those cases you have charged it to him, have you?

Mr. MUHLFELD. Yes, sir.

Senator NELSON. You have made him pay for it?

Mr. MUHLFELD. We have made him pay for it. I just wanted to bring that out, because you had mentioned it once or twice before.

I wanted to bring out these various criticisms that I have heard here; I think it might be of interest to the members of the committee.

We have been criticized for paying for dredges while they were frozen up in the ice. We made arrangements with the American Dredging Co. last fall, shortly after we got the contract, to bring those dredges on the job. We knew that, on account of the speed demanded on this job, we could not lose a day in dredging material.

It is provided in the contract that when the dredge is working we shall pay a certain rental per day for it; when it is not working we pay one-half that rental for it. Those dredges had been working last fall, I think, about a month or six weeks, when the winter shut down on us, an absolutely abnormal winter, and they were frozen in tight; and we had to pay them a rental on those dredges all winter long.

Senator VARDAMAN. What rental was that? Was that a 5 per cent contract?

Mr. MUHLFELD. No; that was based on a fixed rental per day; and we had competitive figures from various dredging contractors, they agreeing to furnish dredges on the per diem basis.

Senator VARDAMAN. Do you remember what one of those dredged is worth?

Mr. MUHLFELD. No: I do not.

Senator VARDAMAN. Do you remember what you paid for them?

Mr. MUHLFELD. We did not buy the dredges.

Senator VARDAMAN. I mean what rental you paid for them?

Mr. MUHLFELD. I could not tell you offhand: that is all a matter of record. But I think a dredge with a 20-inch suction—this is a suction dredge—I think the rental for that is about $720 a day.

Senator VARDAMAN. $720 a day?

Mr. MOHLFELD. Yes.

Senator HRADING. Is that the active or the half rental?

Mr. MUHLFELD. That is active rental, and it would be half of that if it were not working.

Now, those dredging contractors could have used these dredges in southern waters, or in any place where the water was more salt and would not freeze. But we had to get this work done, and if we had held off until spring before bringing those dredges to Hog Island we would have been delayed six or seven weeks in our dredging operations. You can not get a dredge up the Delaware River much before the 15th of April, while these dredges have been working since some time around the 1st of March. It was a speed game absolutely, and we had to get this work done. There was not any extravagance in that.

Senator VARDAMAN. You do not recall the value of the dredge, or what you paid for it, or what per cent it was of the value?

Mr. MUHLFELD. No: I know that some of those dredges are very expensive. I have known dredges to cost all the way from $50,000 or $60,000 to $250,000. And a 20-inch dredge is a big dredge, you know.

Senator VARDAMAN. Have you any of that type there?

Mr. MUHLFELD. We have some of the smaller dredges, yes; or we have what we call an "orange-peel bucket," that works by dropping this bucket down in the ground and then closes it and pulls up the material. Those are on a different basis.

We have our dredging work let on two different bases under our contracts. One is for pumping on a per diem basis, so much per day for the dredge. Then we have a certain amount of our work let on a yardage basis—so much per yard.

Senator VARDAMAN. Does the dredging company pay the expenses of the man who operates the dredge, or does the Government pay those?

Mr. MUHLFELD. The dredging company.

Senator VARDAMAN. You simply pay a lump sum to the dredging company, do you?

Mr. MUHLFELD. Yes, sir; a fixed rental per day when it is working, and half that rental when it is not working.

Senator VATDAMAN. And you do not recall now the per cent that that rental is of the total value of the dredge?

Mr. MUHLFELD. No; I do not.

Senator HARDING. Do you recall what you paid for the dipper dredge—as rental?

Mr. MUHLFELD. No, I can not tell you. But we have got any amount of those records there, so that I will be glad to send the information to this committee if desired; it is all a matter of record.

Senator HARDING. Well, did you say, if I understood you correctly, that those dredging contracts were let under competitive bidding?

Mr. MUHLFELD. Yes, sir.

Senator HARDING. Was real competition obtained?

Mr. MUHLFELD. Real competition; yes, sir.

Senator VARDAMAN. Did you ever do any of this work in dredging before—any work of this character?

Mr. MUHLFELD. Yes; it is the same sort of work we have done all over the country.

Senator VARDAMAN. All over the country?

Mr. MUHLFELD. Yes; that is, we have dredged on rivers, and we have dredged on the seacoast.

Senator VARDAMAN. What is the difference between the prices you pay now and the prices that you paid in normal times?

Mr. MUHLFELD. The price we pay for what?

Senator VARDAMAN. For the dredge.

Mr. MUHLFELD. I think the prices we are paying for the dredges, according to my recollection, compare very favorably with what we have paid for the last four or five years.

Senator VARDAMAN. They are no higher than you paid four or five years ago?

Mr. MUHLFELD. I do not think there is any practical difference.

Senator VARDAMAN. What in the world is the matter with the dredging people that they do not go up in price like everybody else has since the war? [Laughter.]

Mr. MUHLFELD. That dredging contract was all discussed by me with Admiral Rousseau, and received his full approval and the approval of the Shipping Board.

Senator VARDAMAN. I know; but you pay higher wages, and the dredging company pays higher wages; and I do not understand how they can do it as cheaply now as they did five years ago.

Senator HARDING. That is because they build the best of them in my town. [Laughter.]

Senator VARDMAN. That may have something to do with it.

Mr. MUHLFELD. There may have been great improvements, of course, in building dredges; they handle more dirt than they used to handle.

The CHAIRMAN. Do you remember how many dredges you have there, Mr. Muhlfeld?

Mr. MUHLFELD. All of the dredges contracted for with the American Dredging Co. have not arrived. One is to come up this spring, as soon as they can get up the river. I think their contract calls for four hydraulic dredges. There are also some dipper dredges that they are working under a contract which is being done by the contractor for so much per yard.

The CHAIRMAN. How many contracts have you for dredging?

Mr. MUHLFELD. We have one with the American Dredging Co.; one with the Delaware Dredging Co.; and one with the Canal Construction Co. I think that is all.

The CHAIRMAN. Is this dredging done in front of the yard, where you are going to place the ways. Is that the idea? That is, there is about a mile of dredging there? Is that where the dredging is being done?

Mr. MUHLFELD. Yes, sir; in front of all the ways. It extends over about a mile of river front; there is some material to be taken out between the ways and the channel of the river. The Delaware River, in some places, is probably 100 feet from the end of the ways, and in other places it may be 200 feet. That material has to be dredged out.

Senator VARDAMAN. Have you made an estimate of what the dredging is going to cost?

Mr. MUHLFELD. I have not made an estimate as to what it will cost.

Senator JOHNSON. Perhaps it is not particularly important, but the dredges that are there at the present time cost approximately what when new.

Mr. MUHLFELD. I could not say from memory.

Senator JOHNSON. I am not asking you to state exactly, but approximately how much. You say you have three contracts now with the American Dredging Co., the Delaware Dredging Co. and the Canal Construction Co. What sort of dredges do they use?

Mr. MUHLFELD. They have hydraulic dredges.

Senator JOHNSON. And they cost about what?

Mr. MUHLFELD. It depends on the size. Some are 20-inch suction, some are 16-inch suction.

Senator JOHNSON. You know the sort that are there. What would you say about the cost of those in that particular locality?

Mr. MUHLFELD. I should not want to make a guess as to what they cost; those things are so much a matter of record, they are so easy for us to obtain, if you desire them, that I do not like to rely on my memory in giving them.

Senator VARDAMAN. Did you make the contracts for those personally?

Mr. MUHLFELD. I assisted in the making of them. It was made by Mr. McConnell——

Senator JOHNSON. [illegible] Do they cost as much as $[illegible] apiece, would you say? These that are in the ground doing the work now?

Mr. MUHLFELD. I do not like to make any guess as to that. I can get that information for you accurately if you desire. There is so much equipment in that job that I hesitate to give the cost of any particular part of it.

Senator JOHNSON. I am speaking only of dredges. I understand you to say that you pay $[illegible] a day for some of those dredges.

Mr. MUHLFELD. That is correct.

Senator JOHNSON. And that you pay $[illegible] for them when they are not working; is that correct?

Mr. MUHLFELD. Yes, sir, half the full price.

Senator JOHNSON. How long have you had the dredges?

Mr. MUHLFELD. We have had the dredges there since some time in November—one of them.

Senator JOHNSON. Early in November?

Mr. MUHLFELD. I do not remember what particular date in the month.

Senator JOHNSON. And most of them you have had there since the 1st of December, have you?

Mr. MUHLFELD. No; some of them are not there yet. They have not arrived.

Senator JOHNSON. Well, I am speaking only of those that you have on the ground, if you please; those that are now on the ground, have you had them there since the 1st of December?

Senator VARDAMAN. You mean on the water at Hog Island?

Senator JOHNSON. I will call it on the water. What I mean is at the particular locality?

Mr. MUHLFELD. Some of those dredges got in somewhere between the 1st of November and the 1st of January. Some were working last fall, or during that period, and some of them that are now there were working on a yardage basis, and when they stopped digging out a yard of dirt they did not get any pay for their dredge or anything else. They get paid for every yard of dirt that they take out.

Senator JOHNSON. I am not particularly anxious to pursue the inquiry, but how many of them are on a yardage basis and how many are on a $720 a day basis?

Mr. MUHLFELD. There is only one that I know of on the $720 a day basis.

Senator JOHNSON. And how many, then, on the yardage basis?

Mr. MUHLFELD. Well, I should say three or four.

Senator JOHNSON. Three or four; so that, altogether, you have probably four or five dredges upon the ground now. Is that correct?

Mr. MUHLFELD. There may be more than that. I do not think there are any less than that.

Senator JOHNSON. Well, I am asking you, as the general superintendent. If you are not familiar with this particular matter, it makes very little difference. If you say so, I will not pursue the inquiry any further.

Mr. MUHLFELD. No, sir. I am not particularly familiar with every piece of equipment that we have on that job.

Senator JOHNSON. I thought you introduced the subject of dredges yourself, did you not?

Mr. MUHLFELD. I did; yes, sir.

Senator JOHNSON. Well, I assumed when you introduced the subject that you were familiar with that particular subject; is that an erroneous assumption?

Mr. MUHLFELD. I am familiar with the contract which we made with the American Dredging Co., by which we paid them a certain rental per day for a dredge when it was working and half that amount when it was not working.

Senator JOHNSON. May I take it, then, that you are familiar with that contract, and that you are not familiar with the details of the other contracts that you have for dredges? Is that accurate?

Mr. MUHLFELD. As to the other contracts for dredging, for which they get so much per yard, I never interested myself to know how many dredges they had, because they are getting paid on the yardage basis.

Senator JOHNSON. All right. Then the only one that you are familiar with is the one with the American Dredging Co.?

Mr. MUHLFELD. Yes, sir.

Senator JOHNSON. You made that particular contract yourself, did you?

Mr. MUHLFELD. I assisted in making it.

Senator JOHNSON. You assisted in making it. They have only one dredge; what is the character of it, or the name of it?

Mr. MUHLFELD. I do not know the [illegible] 20-inch suction dredge.

Senator JOHNSON. Is that the [illegible] as a suction dredge?

Mr. MUHLFELD. Yes, sir.

Senator JOHNSON. The [illegible] familiar with?

Mr. MUHLFELD. I have [illegible] now.

Senator JOHNSON. Can [illegible] cost price of such a dredge [illegible] figures?

Mr. MUHLFELD. I would [illegible] when I am convinced [illegible] figure. I would [illegible]

Senator JOHNSON. [illegible]

Mr. MUHLFELD. I will [illegible] make a statement [illegible]

Senator JOHNSON. [illegible] to the ground, was it?

Mr. MUHLFELD. [illegible] ground, the first suction dredge.

Senator JOHNSON. That [illegible] November?

Mr. MUHLFELD. My impression is that it was there in November and it worked for some time last fall.

Senator JOHNSON. It has been there for about two months substantially?

Mr. MUHLFELD. Yes.

Senator JOHNSON. And during that period, how much work has it done? I mean, in days. Half the time, three-fourths of it?

Mr. MUHLFELD. I could not say positively how much work it has done. It has worked whenever the weather has permitted it to work.

Senator JOHNSON. I do not mean that at all. Could you say what proportion of the time?

Mr. MUHLFELD. No; I could not without looking at our record.

Senator JOHNSON. Could you approximate it at all?

Mr. MUHLFELD. I should hesitate to do that. We have a record of the particular dredge and every day it works.

Senator JOHNSON. How many men work on that dredge?

Mr. MUHLFELD. You mean, when the dredge was working?

Senator JOHNSON. Yes, sir.

Mr. MUHLFELD. I could not tell you that.

Senator JOHNSON. Was not the contract with the American Dredging Co. a subcontract that was made?

Mr. MUHLFELD. That was gone into at the time, and I was thoroughly familiar with it at the time, but we have made so many contracts——

Senator JOHNSON. I realize that. I am not seeking to make any point in the matter of details at all, but it is a contract that was made in writing?

Mr. MUHLFELD. Yes, sir.

Senator JOHNSON. And it was duly executed?

Mr. MUHLFELD. Yes, sir.

Senator JOHNSON. And its terms can be ascertained, of course, from the particular written document. Now, is it not a fact that in tha contract you contracted for the organization of the American Dredg ing Co.?

Mr. MUHLFELD. We contracted for the dredge, the men to operat the dredge, and the use of the superintendent to superintend th operations.

Senator JOHNSON. That is what is meant by the "organization," is it not?

Mr. MUHLFELD. Also their overhead organization; they have a office in Philadelphia.

Senator JOHNSON. Did you not contract to pay for that organi zation?

Mr. MUHLFELD. No, sir.

Senator JOHNSON. Not at all?

Mr. MUHLFELD. The cost of that dredge—what we paid to th American Dredging Co. is all in that daily rental.

Senator JOHNSON. $720 a day?

Mr. MUHLFELD. Yes—if it is $720. My recollection is that tha is what it was.

Senator JOHNSON. I am taking only your figures, you know.

Mr MUHLFELD. I said that was my recollection.

Senator JOHNSON. I thought you stated it as a fact before anybod had questioned you at all

Mr. MUHLFELD. No, sir; I stated that was my recollection.

Senator JOHNSON. And no part of their organization and no par of their overhead is paid for by the Government, you say?

Mr. MUHLFELD. There are so many of those contracts, so man conditions of renting equipment, etc., that I would prefer to send yo that contract, Senator Johnson. It states explicitly just what the do earn.

Senator JOHNSON. Very well. We may leave in abeyance the the question of whether or not the overhead is paid for by the Govern ment.

Mr. MUHLFELD. I think not.

Senator JOHNSON. But you are not certain on the subject at all?

Mr. MUHLFELD. I know that we pay so much a day for the use o that dredge.

The CHAIRMAN. Does that include the force necessary to operat the dredge?

Senator JOHNSON. That is what I am driving at, Mr. Chairman Mr. Muhlfeld stated to me so, but I wanted to be certain in th record upon that point. If he can not be certain I do not care t press him upon it, of course.

Mr. MUHLFELD. I would rather send the contract here, because i states clearly just what they are to earn.

The CHAIRMAN. When the dredge is idle is there a pay roll whic includes the men who are on that dredge and not working?

Mr. MUHLFELD. Yes; and they are paid for by the contractor That is my recollection.

The CHAIRMAN. Not by the Fleet Corporation?

Mr. MUHLFELD. Not by the Fleet Corporation.

Senator NELSON. You pay half time when they are not working

Mr. MUHLFELD. We pay half the daily rental price.

The CHAIRMAN. [illegible]

Mr. MUHLFELD. [illegible] recollection.

Senator JOHNSON. [illegible] of the [illegible] operating [illegible] so that we [illegible] consideration [illegible]

Mr. MUHLFELD. [illegible] believe [illegible]

Senator JOHNSON. [illegible] You have [illegible]

Mr. MUHLFELD. [illegible]

Senator JOHNSON. [illegible]

Mr. MUHLFELD. [illegible] Johnson.

Senator JOHNSON. [illegible] million dollars [illegible]

Mr. MUHLFELD. [illegible] California. [illegible] around [illegible]

Senator HARDING. [illegible]

Senator JOHNSON. [illegible]

Mr. MUHLFELD. [illegible]

Senator HARDING. [illegible] old player here.

Mr. MUHLFELD. [illegible]

Senator HARDING. [illegible]

Senator JOHNSON. The point I was asking [illegible] we have had this dredge for [illegible] that period we would have had [illegible] the rental would seem to be at least [illegible] not think?

Mr. MUHLFELD. My recollection is that [illegible] working on the dredge.

Senator JOHNSON. An important item in figuring [illegible] I grant you.

Mr. MUHLFELD. In some of those dredge contracts they [illegible] the coal and everything used.

Senator JOHNSON. Have you had any trouble in getting coal [illegible]

Mr. MUHLFELD. We had to furnish the coal for them and [illegible] them.

Senator JOHNSON. Do you know about the other dredges [illegible] of the Delaware Dredging Co. or the Canal Construction Co.?

Mr. MUHLFELD. There are too many contracts there for me to rely upon my memory, Senator Johnson.

The CHAIRMAN. You can furnish that for the record?

Mr. MUHLFELD. Yes; I will be glad to furnish copies of those contracts. I am sorry I did not bring them with me.

Senator JOHNSON. I think the Shipping Board has them.

Mr. MUHLFELD. They were all approved by them and a copy was kept.

Senator JOHNSON. You will find a memorandum of all the contract here, I think, Mr. Chairman. They were furnished by the Shipping Board on some former occasion.

Mr. MUHLFELD. The reason I brought up that matter of the dredge was to show that on a job of this kind this speed was so essential we had to take a chance of there being an open winter. We got some use of these dredges last fall and in the early winter, and we have been able to get the use of those dredges six or seven weeks this spring before we could have gotten them had we had to bring them up the river from the Atlantic seaboard somewhere.

Senator VARDAMAN. Just there, Mr. Muhlfeld, let me ask you this. Do the stockholders or directors in these companies that own the dredges own any of the stock in the parent shipbuilding company?

Mr. MUHLFELD. Not to my knowledge.

Senator VARDAMAN. They have no connection with it?

Mr. MUHLFELD. None whatever, to my knowledge.

Senator VARDAMAN. Has that matter been investigated?

Mr. MUHLFELD. Not that I know of particularly. I do not think it has been brought up here before the committee.

Senator VARDAMAN. Well, it was brought up before the committee with reference to the subcontractors being stockholders and directors in the parent company.

Mr. MUHLFELD. What I mean, Senator Vardaman, is that I do not know of my own knowledge, but I know that a stock like the American International Corporation, which is sold on the stock exchange, may be in almost anybody's hands at various times. But I do not know to my knowledge that any of these people have any of that stock.

Senator JOHNSON. You speak about the stock being sold upon the stock exchange at various times. Do you know when it was put upon the exchange?

Mr. MUHLFELD. No, I do not, Senator Johnson.

Senator JOHNSON. Do you know whether it was prior or subsequent to this particular contract?

Mr. MUHLFELD. No; I do not remember that.

Senator JOHNSON. Do you know whether or not it was ever upon the exchange until this contract was contemplated?

Mr. MUHLFELD. I have not any recollection of it. All I know is that I see it quoted now and then on the exchange, and notice that there are certain transactions in it.

Senator JOHNSON. Are you a stockholder of the American International?

Mr. MUHLFELD. Yes.

Senator JOHNSON. I am not speaking of the subsidiary corporation but of the original.

Mr. MUHLFELD. Of the American International Corporation?

Senator JOHNSON. Yes.

Mr. MUHLFELD. Yes, sir.

Senator JOHNSON. And vice president of the subsidiary corporation?

Mr. MUHLFELD. Vice president of the American International Shipbuilding Corporation.

Senator JOHNSON. The contract, if you recall, that was entered into between the American International Corporation—you are not an officer of that?

Mr. MUHLFELD. No; I am not an officer of the American International Corporation.

Senator JOHNSON. So that the men we were speaking of a brief period ago, concerning the executive officers, if covered by the contract, would not apply to you?

Mr. MUHLFELD. I am not positive of that, but it seems to me it furnished the executive officers of Stone & Webster too, did it not?

Senator JOHNSON. I do not recall that.

Mr. MUHLFELD. I do not either.

Senator JOHNSON. I am not clear on that myself. You are an executive officer of Stone & Webster?

Mr. MUHLFELD. I am manager of construction for Stone & Webster. Stone & Webster is a partnership, and I am not a partner.

Senator JOHNSON. You are not one of the owners?

Mr. MUHLFELD. No, sir.

The CHAIRMAN. Proceed, Mr. Muhlfeld, with your statement.

Mr. MUHLFELD. We have been criticized for having too many men shoveling frozen cinders from freight cars.

Senator JOHNSON. Leave out the frozen cinders. [illegible] too many men? Did you not get [illegible] in the beginning?

Mr. MUHLFELD. There have been [illegible] when we have not had [illegible] in my recollection when we [illegible]

Senator JOHNSON. [illegible] housing facilities, and [illegible] that there was no [illegible]

Mr. MUHLFELD. [illegible] had too many men.

Senator JOHNSON. [illegible]

Mr. MUHLFELD. [illegible] having 15 or 20 men shoveling cinders [illegible] if we had had a mine [illegible] part of the country we could have [illegible] freight car loaded with cinders [illegible] unloaded these cinders for [illegible] came there frozen solid [illegible] just as I have shown [illegible] to pick them up. [illegible] those cinders unloaded [illegible] care of our requirements [illegible]

Senator LANGER. [illegible] as they were.

Mr. MUHLFELD. [illegible] coal came in that [illegible] requirements for [illegible] frozen solid. [illegible]

Senator LANGER. [illegible] have been normal.

Mr. MUHLFELD. [illegible] had not been [illegible] between [illegible]

The CHAIRMAN. [illegible]

Mr. MUHLFELD. [illegible] [illegible]

Senator RANSDELL. How much moisture is there in coal? I am very ignorant about that; I had not thought there was any.

Mr. MUHLFELD. I do not know how much moisture there is, but it becomes wet largely from the rain and snow getting on top of it. I happened to be passing through the Jersey Terminal last winter, which is just outside of New York, and they had hundreds and hundreds of cars there that they were steaming in order to get the coal out.

Senator NELSON. You see, Senator Ransdell, there is snow all over the top of the coal, and it melts and forms a cake on top. But should not think it would cake it down in the bottom of the car or in the middle.

Mr. MUHLFELD. I have seen some of those cars there, Senator, frozen solid right straight through. You could open the bottom dump and not a bit would run out.

We had these difficulties and met them and overcame them. We had to put in our sewer and waterworks system. We knew when spring came we had to have proper sanitary conditions for the men. We had to have water for our compressor plants, and instead of being able to trench through there as we would in an ordinary season, through a few inches of frost, we had sometimes 20, 30, or more inches of frost. We had to blast that stuff away and steam it. It is a good deal more difficult, as any construction man knows, to blast a lot of frozen earth than to blast rock, because the rock has a stratification in it.

Senator NELSON. Where did you get your water from?

Mr. MUHLFELD. Out of the river. The water for the waterworks system?

Senator NELSON. Yes.

Mr. MUHLFELD. That comes out of the river.

Senator NELSON. And the water for cooking and drinking purposes?

Mr. MUHLFELD. We put in a temporary plant to take water from the river. The river water has been carefully analyzed—it is analyzed almost daily.

Senator NELSON. It is not brackish or salt?

Mr. MUHLFELD. No; it is not; it is not salt water.

As to this matter that Senator Johnson was speaking of, having too many men at times, it is a well known fact that in every well-managed manufacturing plant they have certain gangs of men, certain floating gangs, going around that are apparently not busy all the time, but are there when they need them. But they get out a higher production. That is what we were trying to do—trying to speed up this job—and we wanted the men there when they were needed. Everything you do in the way of speed costs money.

Senator JOHNSON. Do you mean you wanted them for work done by you or by your subcontractors?

Mr. MUHLFELD. The work that was done by us or by subcontractors; the business was all being done under our direction.

Senator JOHNSON. Do you know whether these men were brought there by subcontractors or by you?

Mr. MUHLFELD. The men were all on the pay roll.

Senator JOHNSON. I realize that, but did you want these men used for specific work to be done by you or specific work that you sublet?

Mr. MUHLFELD. Sometimes work was done by us and sometimes it was work which some of the subcontractors' forces were working on, too, but it was all being paid for by the Government. The men on the subcontractors' pay roll were on our pay roll—on the Government pay roll. We paid them.

Senator JOHNSON. I understand that. Did the subcontractors have a subcontract?

Mr. MUHLFELD. I do not know just what you mean, Senator Johnson.

Senator JOHNSON. You sublet certain contracts for various portions of the job?

Mr. MUHLFELD. In our subcontracts, we obtain the use of their forces and the use of some of their equipment on parts of the work.

Senator JOHNSON. Yes. Now, did those contractors with whom thus you dealt, themselves sublet any part of the work?

Mr. MUHLFELD. No: none whatever.

Senator JOHNSON. On no occasion?

Mr. MUHLFELD. No, sir; and those forces of the subcontractor were just as much a part of our organization as the men we had put on there ourselves.

Senator JOHNSON. I do not follow that.

Mr. MUHLFELD. I mean, they were just as much a part of our organization; they were working under our direction.

Senator JOHNSON. Yes; but they were not a part of your organization, were they. You had contracted specifically for the other organizations?

Mr. MUHLFELD. We contracted for the use of these men, and they were put in and made a part of our organization. Senator.

Senator JOHNSON. They were put under you in the same way you were under the Fleet Corporation, but when you entered into those subcontracts you specifically contracted, as you will find if you refer to your subcontracts, for the organizations of these subcontractors, and in some instances for their accountants, for their office forces, and the like. Do you not recall that?

Mr. MUHLFELD. I have one of those subcontracts here.

Senator JOHNSON. They are all here. There were some of that sort, were they not? Those particular individuals were not a part of your organization, except that you had a general supervision ove the work that you sublet?

Mr. MUHLFELD. We had a direct supervision over them; we told them just exactly what to do.

Senator JOHNSON. I grant you that, but they were the subcontractors, and when they finished they and their organization left, did they not?

Mr. MUHLFELD. Yes.

Senator JOHNSON. Why, certainly.

Mr. MUHLFELD. We hired them to come there to do a certain part of the work.

Senator JOHNSON. But you do not assert, do you, that they were a part of the Stone & Webster organization?

Mr. MUHLFELD. Not of the Stone & Webster organization, but a part of the Government's whole organization down there, all its forces.

Senator JOHNSON. Oh. In fact, the Government paid them?

Mr. MUHLFELD. Yes; and they were working under the direction of the agent.

We had a lot of difficulty there with our transportation of men and materials. When we started there there were not any railroad tracks into the job. We got them in in a very short time, from the Pennsylvania Railroad and the Reading Railroad. Those tracks were gradually improved. We built tracks on our own property. The railroad companies were improving their tracks, and now we have a very good railroad transportation system there. But last winter the railroads did not have facilities that were adequate for handling the transportation of 20,000 men back and forth. We made arrangements with the steamboat companies, but there were six or seven weeks last winter when the river was so full of ice we had to discontinue that.

At that time those men that were working there, on account of the difficulty of transportation at times, took as long as three or four hours to get to work in the morning, and three or four hours to get away from it at night. It was an absolute mystery to me why these men were willing to work on a construction job under those difficulties. I do not believe that they would do it, but for the fact that they were seeing something grow all the time and there is a sort of fascination about it. But they stuck it out.

Senator VARDAMAN. They were only paid for the time they were at work, or were they paid for the time going and returning?

Mr. MUHLFELD. The first month that we worked there the men were paid from the time they landed on the job and were actually at work. For a few weeks the transportation difficulties were so great in that extremely cold weather, and there was so much dissatisfaction and the men would not come back to work that we paid for the time when the trains should have arrived. That was done for a short period. We are now paying the time that they actually work on the job.

Senator VARDAMAN. How long did that system last?

Mr. MUHLFELD. That system lasted during the extremely cold weather. I do not know how long that was.

Senator VARDAMAN. Three or four months?

Mr. MUHLFELD. Oh, no. No; it did not last that long.

Senator VARDAMAN. Three months?

Mr. MUHLFELD. I should say six or seven weeks, or something like that, perhaps.

Senator VARDAMAN. About two months? The train was due, we will say, at 8 o'clock in the morning, and if it did not arrive until 10 the men were paid anyway for the two hours?

Mr. MUHLFELD. If the train was due at a certain hour there was a leeway there. The trains were due to arrive there half an hour, and some of them an hour before the men were supposed to go to work. If those trains were not there at the time the men were expected to go to work and the delay was due to the train service, we paid them for the time that the train was late.

Senator VARDAMAN. What was the average delay? You said sometimes three or four hours?

Mr. MUHLFELD. Yes; it has been as high as that. There has been as much as three or four hours' delay from the time the train was due to arrive. That did not happen very often, but we did have a delay

[illegible]

of half [illegible]
[illegible]

Senator VARDAMAN. [illegible]
in by the [illegible]

Mr. MUHLFELD. [illegible]
[illegible]
[illegible]
by [illegible]
own motors. [illegible]
every means [illegible]

Senator VARDAMAN. [illegible]
the [illegible]

Mr. MUHLFELD. [illegible]

Senator VARDAMAN. [illegible]
[illegible]
a [illegible]

Mr. MUHLFELD. [illegible]
of [illegible]

Senator [illegible]
[illegible]
[illegible]

Mr. MUHLFELD. [illegible]
[illegible]
[illegible]
[illegible]

Senator [illegible]

Mr. MUHLFELD. [illegible]
[illegible]

Senator [illegible]
[illegible]
[illegible]

Mr. MUHLFELD. [illegible]
[illegible]

The CHAIRMAN. [illegible]
[illegible]

Mr. MUHLFELD. [illegible]

The CHAIRMAN. [illegible]
[illegible]

Mr. MUHLFELD. [illegible]

The CHAIRMAN. [illegible]
found [illegible]

Mr. MUHLFELD. [illegible] that the [illegible] get discouraged and would go to other [illegible] would not have to take this long [illegible] time down there, and we sent hundreds of men [illegible] frost bite. Those men would be out of [illegible] But some of the men would get discouraged and would [illegible] the next day.

Senator VARDAMAN. How many men have you now, Mr. Muhlfeld?

Mr. MUHLFELD. We have a working force of about [illegible] men at Hog Island to-day.

Senator VARDAMAN. What is the difference between the number now and a few weeks after the beginning?

Mr. MUHLFELD. Our forces built up from a few hundred men at the start to about 20,000 or 22,000 men.

Senator VARDAMAN. Have you ever had any more than that? I think somebody testified here that you had 30,000.

Mr. MUHLFELD. We have never had 30,000 men. This [exhibiting a chart] shows the number of men. We started in here [indicating] in October, and in November we got up to almost 4,000, 6,000, 8,000, 10,000; and in January we got up to almost 22,000. We have not got March plotted here.

One of the most successful principles in the contracting business is, as they say, to just bury your men with material. That is, you must have plenty of material on hand, so that the men can see that it is there, so that they can see they are not going to be out of work in a day or so on account of the nonarrival of material. Now, we have been criticized there for having too many cars of material on hand. It was said there was great congestion there. We ordered this material according to schedule; certain parts were to arrive at a certain time, and other parts at another time. That material came to us at Hog Island quicker under the Government priority than we had ever been able to get it during peace times. We rushed the timber across the country from Seattle in peace times by having a personal car tracer, with expediters all along the way; but in this particular instance here we got a good deal of that material in about half the time we had ever been able to get it during peace times. That was due to Government priority. We had the men, and as quickly as those cars came in there we unloaded them and relieved the cars. We knew it was going to help our own situation there, and to help the situation all over the country.

Senator VARDAMAN. There was no delay in unloading, I understand you?

Mr. MUHLFELD. As a practical matter there was no delay in unloading. As fast as the cars arrived we put the men on and got them unloaded. Some cars in outlying districts did not get to us immediately, but those that got into our place there we unloaded just as quickly as they came. Of course it took a lot of time to unload a car that was frozen solid.

Senator VARDAMAN. Some witness before you testified that there was a great congestion of cars there, on account of the delay in unloading, and there was some criticism, by somebody of that contributing to the shortage of cars and the movement of coal and other war materials.

The CHAIRMAN. Some witness testified, I think, that there were 1,200 cars there at one time.

Senator VARDAMAN. That there was great congestion.

Mr. MUHLFELD. Of course there was congestion all over this part of the country. We had some congestion there. As I say, this material arrived there quicker than it had ever arrived in peace times, but the men jumped in and unloaded it just as fast as it possibly could be done, and it was very much better to have the material there and not have the men waiting for it, than to have the men waiting for the material. This was a rush job all the way through; it had to be rushed.

Now, I was speaking about the confusion that people had mentioned and criticised us for. At the very start of this job we organ-

ized what was called a planning board. We had some of our leading men to plan the different parts of the work. We had a chart room there where we have some 20 different charts showing each part of the work, when it is to start, when it is to be completed, and the day by day progress. All that work was being coordinated in accordance with these charts. It is a thing we have kept up day by day. So while there may have been some confusion there to the casual visitor, anybody who really studied that situation and knew what we were doing with these charts would realize that the thing was being handled systematically.

At the present time we have 12 ways ready for the laying of keels, with the exception that we have not the steel for the towers on which the derricks rest. Between each set of ways we have put in these steel towers, as shown here [exhibiting photographs]. On top of those steel towers rest the derricks for hoisting parts of the ship into place. Without those derricks you can not hoist steel.

While I am talking of this matter now, I want to tell you here that if we are going to get ships, if this Government is going to get these ships, there has got to be a most decided effort made by the Government to get us the steel. Those towers on which those derricks rest were ordered last November. They only amounted to about 6,000 tons of steel, but even to-day we have not got all those towers.

Senator VARDAMAN. Who is to blame for that?

Mr. MUHLFELD. We have done everything possible to get that steel there. As soon as Admiral Bowles came to Philadelphia that was the first thing that he inquired into. He has been very much alive to that situation. It shows how serious this steel situation is. That is just one of the messages I want to bring to this committee, that we have been working down there at that yard, that we have done our part, and we are getting that yard into shape, and that yard will not delay the building of a single ship. But if we do not have the steel we will never in the world get the ships, and I think the Senate, the Congress, and the Government - -

Senator VARDAMAN. The Senate and Congress have nothing to do with that, as you doubtless understand. That is the work of the Emergency Fleet Corporation.

Mr. MUHLFELD. The Shipping Board is doing everything it can, but it goes beyond the Shipping Board. I do not know just to what point or where, but I think that if there is one thing that should be investigated it is the matter of getting this steel, to see how we can get the steel. There is plenty of capacity in this country if we can get things coordinated.

While I am talking of this matter I want to read a memorandum dealing with delays in delivery of steel. This is a report made by our mill inspector, who has gone around to these different rolling mills to see why we did not get the steel sent to the fabricators.

The CHAIRMAN. What is the date of that?

Mr. MUHLFELD. It is a report as of February 18 and March 19. This report says [reading]:

On January 12, 1918, a general embargo was issued against shipments. This was not listed by the Pennsylvania Railroad until after February 18. It was listed by the Reading on February 9.

Senator VARDAMAN. Right there, why was that embargo put on? Was not that due to the fact that you could not unload the cars?

Mr. MUHLFELD. No, sir. It was not due to that.

Senator HARDING. Due to the railroads' inability to deliver it?

(Mr. Muhlfeld then read the memorandum referred to, which is here printed in full, as follows:)

MEMORANDUM SHOWING DELAYS IN STEEL AS OF FEBRUARY 18 AND MARCH 19, 1918.

On January 12, 1918, a general embargo was issued against shipments. This was not lifted by the Pennsylvania Railroad until after February 18. It was lifted by the Reading on February 9. It required special application to be lifted in specific instances, but each application consumed much time and considerable detail. An order of Mr. McAdoo lifting it on all ship material, signed February 11, had not reached some of the railroads until almost two weeks thereafter. Many mills were at that time shut down for a month because of a combination of embargoes and fuel shortage. One mill had 130 cars of coal confiscated, and when it tried to borrow coal from a railroad the coal administrator forbade this. The general condition resulting from this situation set back our material for about four weeks. Even then, the mills did not reach a production of more than 50 per cent of their capacity.

Taking up instances of mills doing work for us, the following conditions appeared on February 18:

(1) *Allegheny Steel Co.*—On account of lack of fuel, our orders placed with them December 25, 1917, were not moved until the 8th instant and the 11th instant. This material should have been shipped by the 15th of January, and the delay is approximately four weeks. This material was very urgently needed as the portion which went to the Carroll Porter Co. was in the ship's bottom.

(2) *Bethlehem Steel Co.*—On account of embargo and fuel shortage, this has caused a delay of three to four weeks.

(3) *Carnegie Steel Co.*—This mill had very important material required by the Bellfontaine Bridge & Steel Co., Brookville Bridge Co., Penn Bridge Co., and the Dominion Bridge Co. Their orders were about two weeks behind time when embargo went into effect. They rolled the material, but could not ship, and application was made on January 30 for special permits, but they were not received until the 12th of February for the Penn Bridge Co. and Brookville Bridge Co., the 13th for the Bellefontaine Co., and the 15th for Dominion Bridge Co. In the meantime we have shipped by express enough material for one ship. This material is at least four to five weeks behind time.

(4) *Central Iron & Steel Co.*—This mill would have shipped practically all of our material in January had it not been for loss of time due to embargo and fuel shortage.

(5) *Donner Steel Co.*—This mill was not on Lloyd's approved list when our order was allocated with them by Washington. We succeeded, in about two weeks, in getting their mill approved. They were then delayed and caught with the embargo In all, we lost four to five weeks with them.

(6) *Eastern Steel Co.*—Our orders to these people included material in keels, required first in construction. They were caught with lack of fuel, and our first five keels were delayed two to three weeks because of this. The Fuel Administrator confiscated 130 carloads of their coal and were not allowed to borrow coal from the railroad.

(7) *Jones & Laughlin Steel Co.*—This mill has been receiving their coal by barge shipment, and when the river froze they could not get their usual supply. When they tried to get 300 cars per day by railroad they could not do it, and their South Side mill, where shapes are rolled, has been shut down and will not start until February 18. It will take some time to get up anywhere to capacity. This will dealy the receipt of material for five to six weeks. On plates Carroll Porter were held for four weeks by lack of fuel and not being able to get permits to move.

(8) *Illinois Steel Co.*—This company was tied up by reason of the severe snowstorms which prevented them from moving material in or out of their plant. They have now reached about 50 per cent capacity and can not reach normal before March 1 It is safe to say the delay has been three to four weeks at this mill.

(9) *Lackawanna Steel Co.*—Dominion Bridge Co., Toronto, has been delayed three to four weeks because of embargo and fuel shortage. The Hamilton Bridge Co.'s material, which is very important, will also be delayed a like time.

(10) *Midvale Steel & Ordnance Co.*—This mill, I understand, has not turned a wheel since January 18 and are just now starting in again. This has delayed orders for material to R. D. Wood & Co., McClintic-Marshall Co., by at least four weeks.

(11) *Otis Steel Co.*—This mill lost about four weeks because of lack of fuel and embargoes. This is on material to Bellefontaine Bridge & Steel Co., some very important material.

(12) *Republic Iron & Steel Co.*—[illegible] and the scarcity this mill has lost three to four weeks. The material was received [illegible] Bridge Co. and Bellefontaine Bridge & Steel.

The above was a [illegible] investigation made by our mill inspector as of February [illegible] later [illegible] further detailed inspection showed

(1) *Bethlehem Steel Co.*—[illegible] Bethlehem Steel Co. were delayed as the mills were [illegible] and I understand steel [illegible] during part of the week [illegible]

Week of March 3 all small [illegible] were delayed [illegible] as the mills were working on 7-inch channels for the [illegible] United States Government aeroplane hangars.

Week of March 10 all [illegible] 4 by 3½ angles were delayed due [illegible] which was reported as mechanical trouble.

Week of March 17 they were [illegible] channels, but this will be [illegible] that the mills started last night on blooms for shells, with the result that the channels have been set back for a period of about two weeks, as the [illegible] when these shell blooms. Small sections have [illegible] days this week, especially the 4 by 3½ angles, due largely [illegible] steel.

(2) *Central Iron & Steel Co.*—[illegible] orders scheduled for the week of February 17 were delayed on account [illegible]

Week of February 24 mills [illegible] about four days and our orders were given preference, with the result that arrangements were made with [illegible] portions of badly needed orders were delayed [illegible] raw material for steel.

Week of March 3 orders were delayed due to inability to get steel, although about 80 tons were rolled and shipped during the week.

Week of March 9 all orders delayed indefinitely due to the fact that during this week Central received an allotment of plates for mine sweepers and torpedo boats, and as these plates are to be given preference and are to be rolled at mills at which our orders are scheduled, we shall have to await completion of the preference orders.

(3) *Nagle Steel Co.*—Week of February 17 order delayed two days of this week due to the fact that the mill was shut down on account of high water.

Week of February 24, order delayed larger portion of this week due to labor troubles in the mills, and the men worked only two days this week.

Week of March 3, order delayed due to equipment repairs and inability to get steel.

Week of March 9, order delayed due to inability to get steel and the fact that preference priority orders have been slighted during the above suhtdowns, which necessitated moving back our order.

(4) *Eastern Steel Co.*—Eastern mills at Pottsville have been operating about four days out of the week, but have managed to get orders for the preference list cleaned up, together with some smaller sections on other orders.

(5) *Lukens Steel Co.*—Owing to the lack of fuel, which was diverted by the Government, this company was forced to discontinue operations, and not until Monday, March 11, were they able to continue rolling. They, however, secured enough from stock to ship about 572 tons on order S-496, "B" boats.

Their Universal Mill is now in operation and is rolling material for the inner bottoms for the "A" boats, and they do not anticipate any further delays, but expect to complete our orders needed for March delivery.

(6) *Phoenix Iron Co.*—The Phoenix Iron Co. was also forced to shut down on account of coal being diverted by the Government while en route to their plant. They also experienced difficulty in securing empty cars for loading coal at their mines. However, on March 11 they received a sufficient supply of coal to start their furnaces, which have been idle about five weeks. They are now rolling the material that we have called for for March delivery. Their coal supply is improving daily, and expect to roll to mill capacity from now on.

(7) *Midvale Steel & Ordnance Co.*—Their plant at Coatesville, Pa., was unable to fill our orders on account of mills being shut down due to shortage of supplies. While their furnaces were fired at intervals of five to seven days, they were unable to make enough iron to keep their mills supplied. They were also handicapped on several shipments on account of not having permits to ship over the embargoed railroads.

During the past 10 days they have rolled and shipped about 552 tons of shell plating for R. D. Wood & Co., also about 100 tons of molded plates for the Dominion Bridge Co. Mr. Zahnister told the writer that we could expect 3,000 tons from March 18 to

March 29, and this tonnage will be applied to orders mentioned in our schedule for the first five ships.

Their plant at Johnstown discontinued operations on Friday night, February 15, and expected to resume either Sunday or Monday night following. At the time of their shutdown they were rolling our orders of shell liners, and we undoubtedly lost the production of their mill for at least three days. This will probably be the last time that this plant will be forced to discontine its operations, as their supply of coal is increasing daily.

We were originally promised 10,000 tons from their plants at Coatesville and Johnstown, but we find now that they can only schedule us for 5,000 tons—3,000 tons at Coatesville and 2,000 tons at Johnstown.

The practice has been carried on at the Johnstown plant of picking out certain items and rolling them complete, without touching other items of the same section. This applies particularly to order S-525, all items of which are 15-inch channels, and only the first item was touched.

Senator VARDAMAN. All of that was material for ship construction?

Mr. MUHLFELD. All for ship construction.

Senator VARDAMAN. That has nothing to do with the building of the plant, except——

Mr. MUHLFELD. Except in the case of these steel towers on which the derricks rest. As I said, we had 6,000 tons of that ordered on November 1, and we have not got all of it there yet.

Senator VARDAMAN. But that has had nothing to do with the building of the plant up to date?

Mr. MUHLFELD. No. The point I want to bring out, Senator Vardaman, is that we have got that yard ready down there for the steel as fast as it comes in. We are right on schedule, but if we do not get the steel and if Congress and the Senate and everybody else connected with the Government does not get in here and try to straighten out this steel situation we are never going to get the ships.

Senator RANSDELL. What was the cause of all that delay in getting that steel?

Mr. MUHLFELD. The delay in getting the steel has been due to delay in getting it from the rolling mills to the fabricators.

Senator RANSDELL. I understand that, but what caused that delay?

Mr. MUHLFELD. It is due to all of this that I have read here, Senator Ransdell. It is quite a long story. It is largely due to fuel shortage and embargoes.

Senator RANSDELL. And preferences to the Navy?

Mr. MUHLFELD. Yes.

Senator VARDAMAN. Before you leave the question of labor, do you know whether or not the number and the salaries of employees have been reduced by Admiral Bowles?

Mr. MUHLFELD. Yes; there have been some changes made there.

Senator VARDAMAN. What changes have there been?

Mr. MUHLFELD. We have always gone on the theory in planning and building this yard that we must get all the construction work behind us, so that when the ship steel arrives we will not have anything to do but build ships. Our particular interest was in this particular job. Now, when Admiral Bowles came there he had the interests of the other fabricating shipyards at heart also, and the other shipbuilding companies. So Admiral Bowles, and I think very wisely, mapped out a program so that the ways would come along in just about the sequence that required, so that if the Submarine Boat Co. or the Merchant Shipbuilding Co., or some other shipbuilding companies needed piles or needed certain other material that we were try-

ing to get they could have it and could advance their plant, and at the same time our schedule was to be so arranged that we would have the ways and the different parts all completed as needed. He had the importance of all the shipbuilding industries in his mind when he made that change.

Now, that change has resulted, naturally, in slowing down parts of the work, but those parts will be ready when they are needed. And in slowing down those parts of the work we have been able to let some of the men go. As a matter of fact, Senator Vardaman, we are constantly letting men go, because the construction of the yard is approaching completion.

Senator VARDAMAN. You refer to the laborers, not the high-priced men?

Mr. MUHLFELD. I mean some of our leading men.

Senator VARDAMAN. What changes have been made by Admiral Bowles?

Mr. MUHLFELD. You mean the change that I just explained——

Senator VARDAMAN. Do you know how many he has discharged, and what their salaries amount to?

Mr. MUHLFELD. No. I do not; but there has been a change in the program.

Senator VARDAMAN. Have any of the higher officers been relieved from duty?

Mr. MUHLFELD. Yes; there is one man that I know of, a man in charge of our railroad transportation, Mr. Oviatt. He came there at the beginning of that job, and he was with us until the 1st of March.

Senator VARDAMAN. What was his salary?

Mr. MUHLFELD. His salary was $15,000 a year. He had gone through the worst stages of the work, he had developed the yard, had helped get the organization perfected, and the transportation in good shape. We had gotten over our great difficulties, and Admiral Bowles thought—and, I think, quite properly—that we could get along at this stage of the game with a man of less salary.

Senator VARDAMAN. You still have those luxurious publicity agents? Are they on duty there now?

Mr. MUHLFELD. Those so-called publicity men, I think, Senator Vardaman, have already been explained here before this committee. I know that Mr. Pierce left to go on a foreign mission; he was called away from there. Just what else has happened in that department I think Mr. Kennedy explained the other day.

Senator VARDAMAN. I did not have the pleasure of hearing his testimony.

Mr. MUHLFELD. I do want to impress you with the importance of this steel matter. We can do everything in the world; we can break our necks building that yard and getting that job done, and we have carried it along on schedule——

The CHAIRMAN. You have no delay to report from fabricators?

Mr. MUHLFELD. No; it is the delay in getting the steel from the rolling mills to the fabricators.

The CHAIRMAN. Do you apprehend that there will be a delay there?

Mr. MUHLFELD. There is already delay.

The CHAIRMAN. I mean delay in delivery by the fabricators. Do you believe there will be delay in getting fabricated material to the yard?

Mr. MUHLFELD. No; I do not anticipate any delay on the part of the fabricators if they can get the material to work with.

Senator RANSDELL. According to one of your witnesses who appeared here a few days ago, as I understood him, you had 12 ways ready to begin the laying down of ships?

Mr. MUHLFELD. Yes; except for these towers, Senator Ransdell. We can lay part of the steel with our locomotive cranes, but we can not lay all the steel for the ships until we get these towers.

Senator RANSDELL. Would there be any advantage in starting the laying of your keels until you get your towers ready?

Mr. MUHLFELD. We can go part way; we have done that already.

Senator RANSDELL. On how many ways?

Mr. MUHLFELD. Two ways.

Senator VARDAMAN. And you are obliged to wait on those two until you can finish the towers?

Mr. MUHLFELD. Yes, sir.

Senator RANSDELL. And the finishing of the towers is held up by your inability to get the material?

Mr. MUHLFELD. Inability to get the material. The steel that was ordered last November has not all been delivered, and we have moved heaven and earth to get that steel, and so has Admiral Bowles.

Senator RANSDELL. And until you get that steel you are not going to make any headway?

Mr. MUHLFELD. We can lay some of that steel, but we can not go ahead as we would like to.

Senator RANSDELL. But you have the steel there to lay part of it?

Mr. MUHLFELD. To lay part of the ship?

Senator RANSDELL. Yes.

Mr. MUHLFELD. Yes, sir; we have some of the steel coming in there but it is not coming in nearly as rapidly as we ought to have it. And with these delays that our inspectors report here, it is certainly going to delay this whole program. We placed our orders a long while ago, and we have given all the details.

Senator VARDAMAN. Did you place those orders?

Mr. MUHLFELD. I personally did not.

Senator VARDAMAN. I thought that was a matter for the Emergency Fleet Corporation. I thought they bought all the steel?

Mr. MUHLFELD. That was explained here one day, and I am not entirely familiar with it.

The CHAIRMAN. You make out the order and submit it to them, and they place the order?

Mr. MUHLFELD. They place the orders; yes, sir. We place the contract with the fabricators, but the steel is furnished by the American Steel Institute.

Senator RANSDELL. Mr. Muhlfeld, to bring it down to a concrete proposition, if you do not get that steel pretty soon you are not going to be able to finish the 25 ships that you expected to have ready early in the fall?

Mr. MUHLFELD. We are not, Senator Ransdell, unless we get the steel.

Senator JOHNSON. Has the delay now been sufficient to preclude you from carrying our your program?

Mr. MUHLFELD. Not yet, Senator Johnson, but it will if the delay continues.

Senator RANSDELL. Can you suggest anything this committee can do to help along the situation?

Mr. MUHLFELD. I do not know just how to go about it. If I were a member of this committee I would not know just how to go at that. But I know this, that there is the capacity in this country for furnishing steel for these ships and furnishing steel for several yards of the same size, if we had them. But there is a certain part of the Navy program, a certain part of the Army program, and certain difficulties with the coal situation—it does not seem to me to be properly coordinated.

The CHAIRMAN. This steel for the towers can be made in numerous places, can it not?

Mr. MUHLFELD. Yes; they have no difficulty in fabricating that if they can only get the material. They have to get the angles and plates and all that part of it. I not only have this job at heart, but as a citizen of this country I am interested in seeing this steel get there.

Senator RANSDELL. If you have any practical suggestions you can give this committee I wish you would do it, because we certainly want to help get that material on the ground. I imagine if you are suffering in that way other plants must be suffering in the same way.

Mr. MUHLFELD. I have brought this statement here to show you exactly what the situation is; it shows what the difficulties have been at these different mills.

Senator RANSDELL. Do you know, sir, whether other shipbuilding plants are suffering from lack of steel just as you have been suffering at Hog Island?

Mr. MUHLFELD. I am not familiar with that; I do not know.

Senator JOHNSON. If you get your steel within a reasonable period you believe you can carry out your program, do you not?

Mr. MUHLFELD. Yes, sir; I am positive we can.

Senator RANSDELL. What would you call a reasonable period?

Mr. MUHLFELD. We have certain dates in our schedule when certain parts of steel should arrive. Now, if that is delayed only a week or ten days it might still be possible to keep up with that schedule by putting on more men and working a little bit faster and a little bit harder in certain places. That is a long schedule, and I would have to go over the whole schedule to see, but if we are going to run a month or six weeks behind I do not think we would ever catch up.

The CHAIRMAN. What are your latest advaices about this tower steel? Do you think you will get that within the next few days?

Mr. MUHLFELD. On all the contracts our latest report is that the entire order will be completed by April 1.

Senator RANSDELL. It will be completee, but will it be in your yard?

Mr. MUHLFELD. Well, it will get there a few days later; it does not come from any very great distance. We have 11 towers now being erected, and there is material there for several more, and all of them, our inspectors report, will be completed by April 1. That order has been placed since the 1st of November.

Senator RANSDELL. When will you lay other keels, and how rapidly will you proceed with the laying of the keels and the actual construction of the ships?

Mr. MUHLFELD. Those keels are to be laid, I think, about one week apart. I think there was one March 11, one March 18——

Senator VARDAMAN. What progress have you made with that ship that you saw the keel of?

Mr. MUHLFELD. Very little more than what you saw there, Senator Vardaman [referring to chart entitled "Progress schedule"]. There will be four in March, seven in April, etc.

Senator VARDAMAN. A little more than one a week, then?

Mr. MUHLFELD. They run about a week apart.

Senator VARDAMAN. It is a progressive, continuous program from now on, then, the laying of these keels, the rushing of the ships, and if you do not have trouble with the material you do not see any reason why you should not go on and carry out your program?

Mr. MUHLFELD. None whatever, if we can get that steel there. May I go ahead with this?

The CHAIRMAN. Proceed with your statement.

Mr. MUHLFELD. I have just explained to you the number of ways that we have and the difficulty we have been having with the tower steel. The work is well along on most of the ways; in fact, I think about 30 of them are pretty well toward completion. Shop foundations are in; some of the shops have already been erected. I brought a lot of photographs here that show some of these shops. Lack of steel has held up the erection of some of those shops to some extent, but not seriously as yet. There is a large amount of shop equipment on the job. Nearly all our railroad system is in. The derricks and towers are being put up as rapidly as the arrival of the steel permits. Some of these derricks are already operating. Work on the outfitting basins, the wet basins, is started.

Senator HARDING. Have you had any occasion to inquire about the progress on the manufacture of machinery for outfitting these ships?

Mr. MUHLFELD. Yes; and all the reports we have had to date indicate that they are coming along nicely on schedule. We have inspectors constantly watching those things and all these different factories, watching every part of it. The substations are finished. We have two of our compressor plants in. I should expect that the yard will be substantially completed by June 1.

Senator VARDAMAN. What is it going to cost when completed?

Mr. MUHLFELD. I can not tell you positively what it will cost, Senator Vardaman.

Senator VARDAMAN. $50,000,000?

Mr. MUHLFELD. We have made no estimates on the yard——

Senator VARDAMAN. Since you started?

Mr. MUHLFELD. None, except an estimate that the American International Corporation insisted on having some of our men make, in order to give Gen. Goethals a sort of round figure of what the yard would cost.

Senator VARDAMAN. About $21,000,000, I think.

Mr. MUHLFELD. Yes; about $21,000,000. And with that estimate, which was sent to Gen. Goethals, I understand there was a letter which stated it was nothing more than just a pure guess.

Senator VARDAMAN. It has proven to be a pretty wild guess?

Mr. MUHLFELD. It is impossible, Senator Vardaman, to make an estimate on an undertaking of that kind within seven or eight months'

time. I would [illegible]

[illegible]

[illegible]

Mr. A[illegible]

[illegible]

[illegible]

Mr. MUHLFELD. It has been very materially changed. At that time all we knew, Mr. Chairman, was simply that we were to build in 18 months 50 ships of 7,500 tons, and there was a piece of property there of about 1,000 acres. That is all we knew about it, and to make a thoroughly intelligent and careful estimate on that job would have taken seven or eight months and cost a lot of money. It would have cost a great deal of money.

The CHAIRMAN. And the yard has developed as you have gone along?

Mr. MUHLFELD. The yard has developed. There are a great many more miles of railroad tracks than anyone had any idea of at the start.

The CHAIRMAN. And you have spaced the ways differently?

Mr. MUHLFELD. Spaced the ways differently. There are two different types of ship now, where we had only figured on one. And, as a matter of fact, whether you exceed an estimated cost on anything or whether you fall below that estimated cost does not determine whether the job has been done economically or whether there has been any money wasted. Very frequently in commercial work if you do a job for less money than it was estimated to cost they will say you are a poor estimator; they will not say you did the work cheaply. If it runs over they say that work cost too much; that it was extravagantly done. That estimate is nothing but an estimate.

Senator RANSDELL. The character of the work itself cuts a big figure there too, I suppose, whether it is done thoroughly or improperly?

Mr. MUHLFELD. As I was saying, when that yard is in full swing and building these ships, building 120 under this present contract, and perhaps 120 more, or 500 of them; when you take 500 ships built by that shipbuilding machine there and prorate those 500 over the cost of that yard, it is not very much of a charge against each ship. And there is no reason at all why that yard will not be a better yard after it has built 120 ships than it is right now. Everything will be working along better. Everything will be in better shape. There is no reason why you can not build a thousand ships in that yard. There is not any machine like it in the world. It is the greatest shipbuilding machine that was ever built, and you can not possibly duplicate it for the amount of money that has been spent there. I think if you could, the Government would be glad to seize another one like it.

Senator RANSDELL. If it comes up to your hopes I imagine it will enable the people of America, either the Government or some private concern, to sell ships to the whole world cheaper than anybody else on earth.

Mr. MUHLFELD. They can be built there cheaper than anywhere else on earth. Under this system of fabricating ships we are using all of the existing facilities of the country. You make a contract with a fabricator, and he has up-to-date equipment for fabricating parts. He does have to throw together another organization you were going to build up a great big shipbuilding plant all this work in his own shop. Then you have only over here and assemble it. It is going to be the for that that was ever built; there is no question

As I said before, I have not a bit of doubt th wants to sell that yard at what it cost the

cost and a handsome profit besides, right now, and find that capital will do it.

Now, it seems to me this matter of subcontracts has never been quite clear before this committee. If I may take a little time I should like to go into that a little further. This contract I have before me is with the Arthur McMullen Co., and is for the use of its men, its forces, and covers the rental of certain of his equipment which is to be used in connection with the building of 10 shipways. Now, we had a large organization, but it was not large enough for a job of this size without bringing in and making a part of our own organization the forces as well as the equipment of some of these experienced contractors.

This contract is a proposal form by this Arthur McMullen Co. to the American International Shipbuilding Corporation, agents for the United States Shipping Board Emergency Fleet Corporation. The contract reads:

We hereby propose to construct for you at the new shipbuilding plant at Hog Island, so called, near Philadelphia, Pa., group 5, consisting of 10 launching ways each approximately 540 feet in length of wooden pile construction as shown on your plant.

We will at all times in the prosecution of the work hereunder use our best efforts to protect and subserve your interests, and we further agree to undertake this work promptly, to prosecute it diligently and to entirely complete it at the earliest possible date.

Service to be rendered.—With respect to this work, we propose to act as your agents, being guided in all respects by such instructions as you may from time to time give us.

We will furnish at our own expense:

(a) The service of our executive officers, who will direct and oversee the work.

(b) Our business organization and the services of our principal office accounting auditing, purchasing, and other forces, in so far as required.

(c) All other expenses of our principal office, except only the salaries of men in the engineering and drafting departments for the time they are engaged on the work.

(d) The services of all the above mentioned personnel in organizing and supervising the work.

(e) Equipment as follows:

Eight land pile-driver leads, with rollers, but without lines or blocks; four 70-foot leads, four 60-foot leads.

Eight standard double-drum hoisting engines.

Eight pile hammers: 4 steam, four drop.

One air compressor of ample capacity for the requirements of this job.

Six pneumatic boring machines.

One concrete mixer.

One driving outfit.

One locomotive, 36-inch gauge.

Six flat cars.

400-horsepower boilers.

One floating pile driver.

One mile 45-pound rail.

Now, then, the part of the work on which we wanted to use the forces and equipment of this company was the building of 10 shipways. That did not include the towers, but included the pile-driving and the timber work, which we estimated, in agreement with the Arthur McMullen Co., to cost $550 [illegible] We estimated further that this equipment, which they we[illegible] the job and we were to use, was worth $55,000—all [illegible] per cent a month, based on four month[illegible] it eight months or 10 months if it [illegible] of the work—5hat amounts to 20 p[illegible] 000, the value of this equipment, [illegible] the

Government pays the Arthur McMullen Co. for the use of all this equipment, whether it takes four months to do the work, or three months, or eight months or ten months; it does not make any difference.

Senator HARDING. But you pay more if you change the scope of the work?

Mr. MUHLFELD. If we change the scope of the work, yes. The scope of the work is defined here, Senator Harding. It says: "Consisting of 10 launching ways," etc., But if those 10 ways take him eight months instead of four, he does not get any more for the use of that equipment.

Senator RANSDELL. You pay the daily wage of his employees, but all you would ever pay him for this equipment would be this $11,000?

Mr. MUHLFELD. That is all.

Senator RANSDELL. Whether it took three months or eight months?

Mr. MUHLFELD. Yes. Presumably he can not run a contracting business without some profit. He turns over to us certain of his forces, men who are experienced and skilled in doing all kinds of construction work, especially in this particular line. Those men are put on the Government pay roll, and are paid at the same rate at which the contractor has been paying them. That contractor is entitled to a profit. He gets no profit whatever on his equipment; that just barely returns him his cost. He does not make any more than just what that equipment costs him to carry and keep. He takes care of the depreciation and general wear and tear.

Now, we pay this contractor for his gross profit, for the use of his forces, a fixed fee based on 5 per cent of this estimated cost. In this particular contract the estimated cost was $550,000. Five per cent is $27,500, so that the total fee, including the rental of his equipment and the use of his forces in constructing these 10 shipways amounts to $38,500, of which $11,000 is for the use of that equipment. That 5 per cent on the estimated cost is less by 2 or 3 per cent than what we have been paying in the past.

We could have done the work ourselves, but in spite of the large army of constructors which we had this job was larger than any we have ever undertaken, and we necessarily had to materially increase our forces. Had we done this work ourselves, we should have had to buy at enormous expense or should have been compelled to have leased equipment the same as we have done from the various contractors. We could have drawn up carefully prepared plans and specifications and asked for competitive bids, but no reputable or responsible contractor would have for a moment taken a lump-sum contract on this work unless he included a large margin for profit and contingencies, probably 25 per cent or 30 per cent. As it is, the contractor has received, as above stated, a fixed gross profit based on 5 per cent of the estimated cost. If instead of 5 per cent which the Government is now paying, the contractor had included a 25 per cent or 30 per cent profit in a lump-sum bid, no one probably would have thought anything about it. As a matter of fact, we had no time to carefully prepare plans and specifications, and I doubt whether we could have gotten any contractor to bid on them if they had been prepared. Prices of materials and of labor have been advancing too rapidly for any reputable contractor to take the great risk involved in doing this work on a lump-sum basis.

for the time they are [illegible]
extract from the contract in question [illegible]
are of the same character, just what the [illegible]
at his own expense, for which the Government [illegible]
there is no sub-know how here. We [illegible]
There is no commission paid upon [illegible]
or compensation of any kind or character [illegible]

Government pays for the building of the yard is the fee that the subcontractors will receive on account of these subcontracts, and it has been estimated that the work covered by those contracts will amount in the aggregate to about $8,000,000. The total compensation that will be paid by the Government for the building of the entire yards, whether they cost $21,000,000 or $40,000,000, is about $400,000, and this sum is paid to the subcontractors. Neither American International Corporation, American International Shipbuilding Corporation, New York Shipbuilding Corporation, nor Stone & Webster receive one cent of compensation for the work which these subcontractors are doing, or which anyone else is doing.

Senator RANSDELL. You say that 5 per cent on the estimated cost is less than you have been paying in the past. Do you mean on similar work?

Mr. MUHLFELD. For similar work. We have paid anywhere from 7½ to 10 per cent for this class of work for the use of contractors' forces. It is a thing we have been doing year in and year out.

Senator RANSDELL. There is nothing unusual in this contract?

Mr. MUHLFELD. Nothing whatever unusual in this contract.

Senator RANSDELL. Except it is a smaller fee according to your showing than you have been in the habit of paying?

Mr. MUHLFELD. The contract terms in the way of fee is smaller than we have been in the habit of paying.

Senator RANSDELL. How did you happen to get a small fee?

Mr. MUHLFELD. The contractors who came on this job were known to all of us. We knew about their work, we knew about their experience; we told them, "Here is a rush job, and you will have to come down here and help us out in this situation." We wanted to add their forces to our forces and we were willing to pay them 5 per cent of the estimated cost. There was some argument about it, but they all agreed to it finally.

The CHAIRMAN. How are they going along with that work?

Mr. MUHLFELD. They are going along with their work very well, and it is getting to a point where we are gradually getting down the force, and the yard is, in my opinion, in pretty good shape now.

The CHAIRMAN. What have been your duties there, Mr. Muhlfeld, generally?

Mr. MUHLFELD. Mr. Chairman, I am vice president of the American International Shipbuilding Corporation, and I have devoted, since about the middle of December, practically my undivided time and attention to the building of this yard. When we first started in there Mr. Goodenough was general manager. He not only had the yard, but he also had the job of designing and placing the orders for this fabricated material for the ships. The job was a very large job, and in order to let Mr. Goodenough give his undivided attention to the building of the ships and the designing of them, I have devoted all of my time to this yard.

Senator HARDING. How can you reasonably be there under a Government salary under the contract? You are not an executive officer of the contracting concern, are you?

Mr. MUHLFELD. I am an executive. Yes—I would be called an executive officer of Stone & Webster.

Senator HARDING. I know, but you are not an executive officer of the American International Corporation which has this contract?

Mr. [illegible] Shipping Commission.

Senator [illegible]

Mr. MUHLFELD. [illegible]

The CHAIRMAN. [illegible]

Mr. MUHLFELD. [illegible]

The CHAIRMAN. [illegible]

Mr. MUHLFELD. [illegible]

The CHAIRMAN. [illegible]

Mr. MUHLFELD. [illegible]

The CHAIRMAN. [illegible]

Mr. MUHLFELD. [illegible]

The CHAIRMAN. [illegible]

Mr. MUHLFELD. [illegible]

The CHAIRMAN. [illegible] the Emergency Fleet Corporation [illegible] all?

Mr. MUHLFELD. Yes; the Emergency Fleet Corporation [illegible] inspectors over there at the yard.

Senator RANSDELL. I [illegible] son, that the character of contract the Atlantic Navigation Corporation has with the Shipping Board is substantially the same as a great many other contracts that Stone & Webster have had in the past for big works of different kinds.

Mr. MUHLFELD. Yes; it is.

Senator RANSDELL. And that the fee is about [illegible]

Mr. MUHLFELD. The fee is considerably less, Senator Ransdell. This contract spoken of as a $200,000,000 contract frequently. We have gotten the same fee; we got about $[illegible] on a very much less volume of work. It is true it has been continued in

places. We have never had so much of a contract in one place, but our fees have ranged anywhere from 7, 7½ to 10 per cent, and as high as 12 per cent.

Senator RANSDELL. Does that give a very large net return to Stone & Webster Co., or do they have enough expense in large salaries and expense of various kinds connected with it so that they do not have an exorbitant net return by the time it is all adjusted?

Mr. MUHLFELD. I should say decidedly not an exorbitant net return. If we were building a power station, which is a class of work we do so frequently and get cost plus 10 per cent, but we will be very, very fortunate if we get 5; and if we are doing a piece of building work at 7½ per cent, if we can net half of that we could be doing very well indeed. It goes right back to what I was saying about this contract between the shipbuilding corporation and Stone & Webster, about getting certain experts from our Boston office.

Senator RANSDELL. Is the net return of Stone & Webster very great or very exorbitant?

Mr. MUHLFELD. I do not know. I am not a partner, and I have a contingent interest in Stone & Webster's profits, but I do not know what they are. I have been in their hands a good many years on that, and I do not know what their net profit is.

Senator RANSDELL. They are in the market and have organized other similar corporations for work?

Mr. MUHLFELD. Yes, they have. We are in constant competition.

Senator RANSDELL. So it is an open competitive business that they are doing, and having been in the open competitive American market bidding and getting certain fees, you say they are getting to-day less for this work you are doing there than they have been getting in the past?

Mr. MUHLFELD. Yes; materially less.

Senator RANSDELL. I just wanted that brought out.

Mr. MUHLFELD. Is there anything more about this subcontract? Have I made that clear? I do not know whether I have or not.

The CHAIRMAN. Would you like to have a copy of that contract go into the record?

Mr. MUHLFELD. You already have one, not this one, but another one.

The CHAIRMAN. Yes, that is sufficient.

Mr. MUHLFELD. If there is nothing else——

Senator RANSDELL (interposing). Before you get away from that, I would like to ask you if you have shown all the expense the Government is put to in connection with that subcontract, all the fee that is paid there.

Mr. MUHLFELD. That is all the fee, that $38,500 paid to Arthur McMullen Co.—their profit.

I happened to be here last week when Mr. Goodenough was testifying, and there were some letters read here in regard to two gentlemen by the name of Harris. I got the impression from hearing those letters read, and several other people here got the same impression, that those two Harris gentlemen seem to be unfitted for their work on account of the fact that they were Jews or that their father was a junk dealer; that is the impression I got here from hearing those letters read.

Senator HARDING. You mean you got that impression, or that that was the impression the letters sought to convey?

Mr. MUHLFELD. It was the [illegible]
those letters. It spoke par[illegible]
two Harris boys, as they [illegible]
and I certainly do not [illegible]
or because their father [illegible]
more to their credit [illegible]
they have done so well [illegible]
high standing in the [illegible]

B. W. Harris has [illegible]
selling of construction [illegible]
years. He has [illegible]
down there at Hog [illegible]
is a vast amount [illegible]
and ships, and [illegible]
all that stuff goes [illegible]
great, big job [illegible]
in getting the [illegible]
amount that [illegible]

I have [illegible]
been him [illegible]
what [illegible]
that [illegible]
what [illegible]
a [illegible]

His [illegible]
and [illegible]
has [illegible]
[illegible]
[illegible]
[

has been to look after the placing of the keel blocking, which goes on each way. He is also engaged in erecting these steel towers as they come in. He has been seeing that every part of the derrick is ordered, because he is going to be the man who puts these parts together in the field. He has been busy every day since he came there.

The CHAIRMAN. I wanted to ask you about that, because that occurred in some others in the same way.

Mr. MUHLFELD. There is just one other matter here. I just want to speak about Mr. Gillette, who has also been mentioned here.

The CHAIRMAN. He is manager of hull fabrication.

Mr. MUHLFELD. George Gillette comes from a family in Minneapolis that has been identified with the steel industry for several generations. He has grown up in the steel business and has been connected with the Minneapolis Steel Machinery Co., one of the largest fabricating plants in the Northwest, for a great many years. As a matter of fact, he has a substantial stock interest in that company. He has been sales manager of that company for a long time, and in that job of being sales manager he has become acquainted with the fabricating plants all over the United States, knowing just what they could do, what the capacity was, and he possessed a knowledge that was of tremendous value to us in placing these orders for the fabricated steel.

The CHAIRMAN. Had you known him before?

Mr. MUHLFELD. I had met him but had not known him well. I had known him by reputation. And it was not a question of salary. We had a great deal of difficulty in getting Mr. Gillette to come there. I have a telegram here that was sent to him last September when we were negotiating for his services, by Mr. J. L. Record, who is the principal owner of the Minneapolis Steel Machinery Co. He says here:

GEO. L. GILLETTE,
Willard Hotel, Washington, D. C.:

Without full and detail information as to the character of the contract between the people with whom you will be associated and the Government it is difficult to form a correct opinion as to whether you ought to accept the position offered you or not, but from what I have been able to gather from such information as you have furnished me I believe you can render a valuable or perhaps more valuable service to your country by accepting their proposition than in your present position. We therefore release you without prejudice to act as your judgment may dictate with the hope, however, that your engagement be for a limited period and with such an arrangement as will permit you to return to us if our situation should at any time demand it.

We worked for a week or two weeks in trying to get this man Gillette to come with us, because he possessed a knowledge that would be of great value to the Government. We tried to hire one man for this same position, and he wanted $35,000 a year; and in the [illegible] Gillette we set the figure ourselves. It was not a quest[illegible] it was a question of whether he would come at all [illegible] splendid work there.

The CHAIRMAN. Are there any others?

Mr. MUHLFELD. I believe that is all.

(Thereupon, at 5.10 o'clock p. m., the c[illegible] meet at 2 o'clock p. m. Thursday, March 21,

(The following letters were subsequently submitted by Senator Nelson, and ordered by the committee to be inserted in the record at this point:)

MINNEAPOLIS, MINN., *March 15, 1918.*

Hon. KNUTE NELSON,
United States Senate, Washington, D. C.

DEAR SIR: I inclose clipping from Minneapolis Tribune, in which I am quoted from letter I wrote Senator Davis (said one thing in that letter which was wrong; i. e., that my wife shouldn't do any more knitting), but sharing with so many others here the astounding statement of the salaries that were being paid in that Hog Island embroglio.

When this matter came out that Gillette was being paid $1,250 per month, the steel machinery company was interviewed as to the amount of salary he was paid as their sales agent. The interviewer was cavalierly told it was none of his business. Had these Harrises, Gillettes, etc., as far as we know had any experience in steel construction of any kind it might be different. Instead of them, had the Government employed from this part of the country R. G. Kenley, ex-chief engineer (now general manager) of the Minneapolis & St. Louis Railroad; H. L. Dresser, chief engineer of the Duluth, Missabe & Northern; F. W. Cappelan, city engineer of Minneapolis; Calusen, city engineer of St. Paul; Kalk, of the Soo; Rittenhouse, of the Chicago, St. Paul, Minneapolis & Omaha; George Wilson, chief engineer of the Twin City Rapid Transit Co, the United States has the right to the services of the above men and many more that could be mentioned—men of undoubted ability that would be worth the salaries paid them. Trouble is, that kind of men won't run after these jobs, but would cheerfully serve the country if requested. In part I, page 245, on "Employees and salaries paid," the roster seems to be a kind of post graduate employees of the Stone & Webster Co. I think I ought to be eligible to a $500-per job as I sold that company a few years ago about $20,000 worth of second-hand steel. Page 249, G. R. Groesbeck, photographer, $225 per. Wow. D. T. Pierce, p. 248, $833.33. Executive assistant Barber Asphalt Co., publicity manager, next an assistant publicity manager at $500. It would look as though it was about time to investigate. I don't want to bore you, but the thing looks absolutely outrageous.

Very respectfully, yours,

E. T. ABBOTT

MINNEAPOLIS, MINN., *March 16, 1918.*

Hon. KNUTE NELSON,
United States Senator.

DEAR SIR: As I have been quoted in this matter of salaries of Messrs. Gillette and the Harrises, in the Hog Island investigation and under the publication [illegible] of letters, postal cards, telephone calls, etc., regarding the matter, I have taken the pains to further investigate.

As to the Harris matter—[illegible] according to telephone [illegible] two partnerships or corporations all [illegible] SE., phone call, ex. 2[illegible]. Ma[illegible] of which Abraham Harris is [illegible] Harris, secretary; Leo B. Harris, [illegible]

The supply company has never [illegible] hand machinery, second-hand [illegible] many thousand dollars of business with [illegible] dealers and nothing else. The above is lo[illegible] Minneapolis. Neither the supply compan[illegible] merchandise or stock of any kind for sale. [illegible] appear on the personal property assessment [illegible] is assessed for an automobile the tax on whic[illegible] that is all the assessment I have been able t[illegible]

As to Mr. George L. Gillette, on page 145 [illegible] giving names of employees left-hand column [illegible] United [illegible] and prev[illegible] sacrifice [illegible]

On page 256 of part 1 Mr. Gillette is stated at above salary as "formerly sales manager of the Minneapolis Steel Machinery Co." The city directory of the city gives Mr. Gillette as secretary of that corporation.

Incidentally Mr. George C. Gillette is the son of George M. Gillette, who is vice president of said corporation, this steel machinery company being the successors of the Gillette Herzog Co.

On page 1451 of part 5 I find Mr. C. L. Hradraker listed as receiving $500 per month as an assistant to Mr. Gillette, not giving his former salary, but simply saying "private business."

On page 1448 B. W. Harris is listed as receiving as assistant works manager $1,000 per month and Leo B. Harris, charge of construction equipment at $625 per month, not giving former remuneration, simply saying "varied partnership."

Mr. W. Goodenough, the general manager, in his testimony as published in Minneapolis Journal that the Harrises were cheap and that they were making more money in their private business than they were receiving from the Government, etc.

Now, Senator, if that is true the Messrs. Harris and Gillette should pay a substantial income tax to the Government under their previous employments. Now did they?

Under the law I am precluded from getting this information, but I apprehend it is entirely within the powers of your committee either by putting these gentlemen under oath before your committee or a subpœna duces tecum to the collector to find out. Mr. W. Goodenough is the general manager of this proposition at $2,083.33 per month, formerly chief engineer of the Stone & Webster Co.

Of the 267 employees at a total cost of $96,649 per month, 55 of them are ex-employees of the Stone & Webster Co. (20 per cent). They draw down $22,332 per month, being 22 per cent of the total salary list, and the average being $406 per month per capita; only 7 receiving the minimum of $200 per month. This whole salary list seeming to be a kind of "postgraduate course" of the Stone & Webster employees.

Works manager, $833 per month; assistant, $300 per; progress photographer, $225 per month (wow!); assistant treasurer, $333.33; second assistant treasurer, $500; timekeepers, $225 to $300 per month; office engineer, $450 per month.

On page 727, part 3, janitors are paid $50 per month. (There isn't any janitors in Minneapolis that are working for $50 per.) Charwomen at $25 per month. In the Kasota Block, my office building here, charwomen are paid $30 per month. Apparently the above ladies and gentlemen had never worked for Stone & Webster and were not in the favorite class of Mr. Goodenough. Mr. Gompers ought to organize a union for the above employees.

Since the publication of these matters I have had postal cards, letters, phones, etc. galore. I am stopped on the street regarding, and there seems to be but one sentiment—that this matter of salaries paid is an infernal outrage. As one gentleman expressed it, "I don't feel like buying war stamps to pay a couple of junk dealers and a sale manager $2,500 per month."

The letter carriers are meeting it in their endeavors to sell the small Government securities (they all read the papers).

Part 1, page 246, Capt. William Sterrat, assistant to superintending captain at $300 per, 20 years second mate and purser, various lines, and chief clerk, etc. I have no personal acquaintance with you. I have known Frank Kellogg for a great many years.

I appreciate the difficulties you are in in this matter—and whether your committee can do anything to better it I very much doubt, but whatever you do that man Goodenough ought to be fired and quick, too. I will name you a few men, only a few that would put a different complexion on that job, men that are recognized as engineers of undoubted ability and integrity, men that have done things, but who would never under any circumstances put in or ask for a Government job. The United States Government is entitled to their ervices and they would one and all promptly respond to a United States request but would never ask for it, and would one and all put up their record as "res gestae" that would make all the rest of these records of the Stone & Webster Co. look like "thirty cents."

R. G. Kenley, ex-chief engineer and now general manager of the Minneapolis & St Louis Railroad Co.

Henry L. Dresser, chief engineer of Duluth, Missabe & Northern Railroad Co., Duluth, Minn. A man that can build the ore docks at Duluth and all other steel and wooden structures for 15 years, involving an expenditure of over $10,000,000.

Fred W. Cappelan, city engineer of Minneapolis for over the last 30 years to my knowledge an expert in concrete and steel construction. Ibid.: Northern Pacific steel bridge across the Mississippi River here for the Northern Pacific Co., the Hennepin Avenue (principal bridge here across the Mississippi River) steel arch, the Third Avenue Bridge across the Mississippi River here, one of if not the largest concrete arch bridges in the country.

William De la Barre, chief engineer of the Minneapolis [illegible] Power Co.; builder of the lower dam across the Mississippi [illegible] the technical manager of a $25,000,000 corporation [illegible]

Oscar Clausen, city engineer of St. Paul, an expert in steel [illegible] a manager of men.

Max Tolst, head of Tolst Engineering [illegible] intrusted the building of his big bank and [illegible]

Charlie Kalk, chief engineer of the [illegible]

Rittenhouse, chief engineer of the [illegible] Co.

George S. Wilson, chief engineer of the [illegible] all kinds of railroad, steel, concrete, and [illegible] years' experience, and in the handling of men.

I aver that there is not one man [illegible] of Mr. Goodenough and not one [illegible] he is receiving.

Hugh Cooper, who built the [illegible]

Many more that could be mentioned [illegible] sented on this pay roll [illegible] per month compared with the [illegible] "these are the times that [illegible] building is substantially [illegible] and quit—nothing to [illegible] to do and no demand for their [illegible] Railroad abandoned their [illegible] the head, who was made [illegible] gest railroad contractors [illegible] the first time in 20 years.

I saw in a magazine [illegible] 1917 than was built [illegible]

The fact is, that [illegible] pleted, or whether the [illegible] cheerfully and [illegible]

While we can [illegible] this Hog Island [illegible]

Very [illegible]

The [illegible]

Mr [illegible] concern [illegible] naval [illegible] nation [illegible] in [illegible] lower [illegible] shipyard [illegible] [illegible] the [illegible] Jersey [illegible] side [illegible] [illegible] for the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] experience [illegible] be hired [illegible] land [illegible] across [illegible]

a type, I presume, of a large number of our so-called influential financiers of the country who are looting the country and robbing it. They are like old C. N. Nelson, who used to live in Stillwater and was president for years of the First National Bank who got his start and made his first money and became a millionaire out of selling rotten meat to our soldiers in the time of the Civil War. I knew old Nelson well, and I never saw him or passed him on the street that I did not feel that a very scorpion the scum of the earth, was passing by. He had no sense of common decency, to say nothing about patriotism.

I am inclosing for your information a letter which I clipped out of the Minneapolis Daily Journal, which is interesting reading, and which I thought perhaps you would enjoy. While I have not the honor or the dishonor (whichever you may call it) of knowing personally Mr. Gillette or these Harris Bros., yet I know them by reputation in business, and the Harrises are nothing in the world but a couple of Jewish junkers in the city of Minneapolis. I know their line of business perfectly well. I want to enter my most solemn protest against this sort of thing, and to say that unless the Government can do as Gen. Pershing wired yesterday from France, "Smash the damnable Hun propaganda at home and we will smash the German line over here," it will be the worse for us. Such men as this man Goodenough have got to be smashed. He is nothing in the world but a damnable Hun. The Hun bullets have wounded 1[illegible] families in Minneapolis, and this Hun Goodenough is shooting just as hard as any of the others. To even think for a moment that he has the brains and ability to take charge of that kind of work and demand $25,000 salary is impossible. The late president of the New York, New Haven & Hartford Railway made the statement at the time that affair was being investigated, as you know, that no living man, he did not care what his position was, was worth $25,000 a year to any kind of business. The whole thing is nothing but graft, and how does the Government expect the poor, plain people to deny themselves, as I know they are doing in this city, even going without food that they may be able to contribute to the Red Cross and to buy liberty bonds and thrift stamps. I was conversing with a man who is in the employ of the park board yesterday and he told me that his salary was cut down, and it was only $3 a day to start with and that he had been trying to buy liberty bonds—had started out to buy two bonds of $50 and $100, respectively, and that he and his family had to pinch and go without the necessaries of life, to say nothing of the comforts, in order to be able to buy these bonds and make their contributions to the Red Cross work. And yet, on top of this such monsters in human form as this man Goodenough claim that their services are worth more than $25,000 a year. I most sincerely trust that your committee will see that this damnable Hun is properly handled in this country.

With very greatest personal regard for yourself, and very kindest wishes, and feeling sure that you will nor swerve one single iota from your sense of what is right, and commending to you the noble action of our able and patriotic governor, I am, always

Most faithfully and sincerely, yours,

ANDREW D. STOWE.

[Minneapolis Daily Journal, March 14, 1918.]

A GIRL'S QUESTIONS.

To the EDITOR OF THE JOURNAL:

Not long since I bought a liberty bond for $50. It was the little saving of one year's work. We girls don't make much, but we are willing to help our Government. I came from Norway but I am a citizen of this country now and I will pick up a gun and shoot the heads off any foe of my adopted land. America for me. Mr Editor, I read in your paper that a certain Mr. Gillette and Messrs. Harris Bros. were working for the Government, or rather living at the Ritz-Carlton Hotel in Philadelphia, and were drawing salaries up to $1,250 per month. Is that possible? Who are these smart men? What do they know about "hull fabrication," and who hires and agreed to pay them such enormous sums? What actual work have they done for the Government in time of great stress when we need so many honest men?

I intend to sell liberty bonds next time to the girls. The girls will ask me if Mr Gillette gets $1,250 per month. It will take 15 girls like me a whole year to earn money enough to pay Mr. Gillette's salary one month. The girls will say if the smart men ask so much money, it will not do us poor girls any good to try to buy bonds. Think of it, we do work for America for nothing just because we love the country. How can we explain these things to the people whom we ask to buy the bonds and stamps?

Could we get something from the Government to show how much money the Government is spending on salaries and other things in the war? So we can tell others? We must satisfy buyers that their money will be used to kill Huns and not for salaries. Will you please help a Norwegian girl to be a real good—yes, a crackerjack—American?

Yours, "paa landets vegne." RANDI OLSON.

MINNEAPOLIS, *March 10.*

MINNEAPOLIS, *March 16, 1918.*

Hon. KNUTE NELSON,
United States Senator.

DEAR SIR: Your activity in connection with the investigation of the Hog Island shipyard is very refreshing to we Minneapolis citizens who know the facts regarding the Harrises and Mr. Gillette and Mr. Goodenough.

Personally I know of these men and their ability and I feel ashamed of the whole affair. One look at the junk yard of the Harrises would tell a volume as to their ability to handle anything pertaining to men who are staking their lives against our common enemy. These men are German Jews and they have never done anything in this city to warrant their employment at the work or at the wages they have been given. The effect of these high prices on the poor who are doing their bit and giving their mite is stupifying. Personally I have applied four times to the Chief of Engineers for work in connection with the war work and in each case my application has been "filed for reference" and I have been told there was nothing for engineers at this time, and this has continued since last May and will probably continue until the end of the war. It makes us engineers who are thoroughly experienced feel that we are not wanted, and it appears that there are reasons why men of our class are "not required at present." I can say for nearly all the engineers of this section, and I believe it will apply to most of us in the West, that we are immensely pleased to see you put these fellows on the carpet. I believe Goodenough is the man who should lose his scalp, and he should easily be replaced by a man at $5,000 per year who would be glad to lose $20,000 on his business at home in order to serve his country. To be plain about it, damn these unpatriotic scoundrels who are not big enough and free-hearted enough to serve their country, or too doggish in the manger to step aside and let some one help who is willing and anxious to do so for almost nothing. Again, damn them and kick them out, as they deserve. We will not stand for them.

Yours, very truly,

F. G. L. HUNT.

MINNEAPOLIS, *March 16, 1918.*

Hon. KNUTE NELSON,
United States Senator, Washington, D. C.

DEAR SIR: Beg to acknowledge receipt of your favor of 12th instant, and I am sure you are doing everything possible to correct the terrible injustice being done to patriotic citizens by profiteerers. We all know your loyalty to the Government and are particularly pleased to know you are on the investigating committee of this unfortunate Hog Island affair.

I inclose herewith a clipping from the Minneapolis Journal that will give you a little further insight to the feelings of the Minneapolis people, who are thoroughly loyal, and if you could hear the personal expressions of dozens of loyal citizens you would be further impressed, if that was possible.

It would be pretty hard to convince people here that these men were making any sacrifices (they should be made to show the earnings from their Minneapolis business) in accepting the enormous salaries and they are certainly a discredit to this city if this is true.

I talked with some friends from Duluth and the Mesaba Range and am advised that considerable feeling has been aroused up there, particularly at the enormous salary reported being paid to a man from the shipbuilding company at Duluth, who was normally drawing a salary there of $2,500 per year and was now getting over ten times that salary from the Government. Such things doesn't seem possible to honest men, and these profiteerers should be punished.

I want to think you for the copy of your Lincoln Day address. It was a wonderful expression of the virtues of our martyred President. Wish every one of these disloyal people could read it and profit thereby.

Yours, very truly,

A. W. KERRIDGE.

(The chairman subsequently directed that the following letter from Mr. Charles F. Stuart be inserted in the record at this point:)

NATIONAL WAR SAVINGS COMMITTEE,
Minneapolis, Minn., March 18, 1918.

Hon. D. U. FLETCHER,
Chairman of Committee on Commerce,
United States Senate, Washington, D. C.

MY DEAR SENATOR: I think an injustice has been done to the Harris Bros.—L. B. and B. W. Harris—of this city, and I am writing to you in the hopes that you will see that the records of your committee are corrected on this subject.

My understanding is that your committee has been informed that Leo B. Harris, while in business in Minneapolis, was not capable of earning over $100 a month, and that B. W. Harris was in pretty much the same class.

I do not know what motive anybody could have for making such false statements to your committee, but I know that they are false, and in the spirit of fairness I am asking that they be corrected in the committee records.

I happen to know that Leo B. Harris and B. W. Harris, together with their father, Abe Harris, purchased in the neighborhood of $10,000 worth of liberty bonds, besides bonds purchased for their two sisters. Of the $10,000 purchased by the father and two sons, at least two-thirds were taken by the two boys. Leo B. Harris was a member of the Hennepin County executive committee in the first liberty bond sale, and he sold a great many thousands of dollars worth of bonds, paying particular attention to the fraternal organizations.

I do not know what the income of either Leo or B. W. Harris was prior to their going to the Hog Island Ship Yards, but I know that the $100 a month mentioned would not have been pocket money for either one of them, and my guess is that both of them were at least in the $10,000 a year class.

I have known both of these men for many years and know that they have had intimate friendly business relations for a great many years with some of the largest business institutions in the State of Minnesota, that both of them stand in high regard in this community and were regarded as coming business men of the younger generation, each able to earn a large salary, and each of the highest personal character.

Yours, very truly,

CHARLES F. STUART,
Director of Publicity, Minnesota War Savings Committee

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

THURSDAY, MARCH 21, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 2 o'clock p. m., in the committee room, Capitol, Senator Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdall, Vardaman, Nelson, Jones, Harding, Calder, and Johnson.

The CHAIRMAN. Gentlemen, we have present to-day Mr. Theodore E. Ferris, who desires to make a statement to the committee.

Senator NELSON. Before he begins, Mr. Chairman, I would like to say that I was not aware yesterday that Mr. Muhlfeld would bring up the matter of the appointment and salaries of the two Harris brothers and Mr. Gillette, of Minneapolis, Minn. I was obliged to leave the room before the committee adjourned last night. I have here some letters relating to those men that I would like to have inserted in the record following Mr. Muhlfeld's testimony of yesterday.

The CHAIRMAN. If there is no objection on the part of the committee, the letters will be inserted at the proper place in the record of yesterday's hearing.

Senator NELSON. Yes; let them go in the record following the testimony of Mr. Muhlfeld.

The CHAIRMAN. I have also received a letter from Charles F. Stuart, director of publicity, Minnesota War Savings Committee, Minneapolis, Minn., addressed to me as chairman of the committee, with reference to Leo B. Harris and D. W. Harris. This letter can be inserted in the record immediately after the letters submitted by Senator Nelson.

(The letters referred to are printed at the end of the record of Wednesday, March 20, 1918, p. 2308.)

Senator CALDER. Mr. Chairman, I have had several conversations with you about Mr. Ferris attending to-day. He is here, of course, at his own request; and he asked me if it would be agreeable to the committee for him to prepare a statement and be allowed to read it, and said that at the conclusion of the reading of it he would be glad to answer any question that any members of the committee might ask him.

I hope that he will be permitted to read his statement through, unless something very important comes up about which some member of the committee desires to ask before Mr. Ferris finishes his statement.

The CHAIRMAN. If there is no objection, that course will be pursued. The members of the committee will have the right to interrupt Mr. Ferris, of course, in the reading of his statement, if they desire to ask a question at any point, or they can withhold the question until he has finished.

You may proceed now, Mr. Ferris.

STATEMENT OF MR. THEODORE E. FERRIS, OF NEW YORK CITY.

Mr. FERRIS. All right, Mr. Chairman; thank you. I will read the statement which I have prepared. [Reading:]

Gentlemen, permit me to thank you for affording me a hearing in the midst of matters before you of such great public interest.

Until my connection with the Fleet Corporation I was for many years in private practice as a naval architect and engineer, specializing on merchant vessels. I had built up a large practice which had brought me into intimate relations with most of the important shipbuilders and shipowners in this country. Such a practice presents abundant opportunities for improper commissions from interested parties; but throughout my professional career I have always refused to accept any compensation except from my clients or to serve any other interests; and I have enjoyed the reputation of absolute probity in the practice of my profession. This reputation has always been more valued by me than any reputation I have for ability.

After only nine months in the Government service I find myself suddenly dismissed as unfit because of improper dealings. I say dismissed, because although I was permitted to resign, it was merely as an alternative to being dismissed. On January 17, 1918, Admiral Bowles requested my written statement of "my relations as a naval architect for any persons doing business with the Fleet Corporation, whether for contract or requisition vessels as soon as possible." I complied with this request January 21 according to my understanding of what was desired. My statement appears at page 1270 of the record. At request of Admiral Bowles, Mr. Stern, of the legal division, on January 23 submitted a report which declined to take my statement as correct and charged me with improper relations with the Clinchfield Navigation Co. and the Jahncke Shipbuilding Co. (record, p. 1282).

Upon receipt of this report Admiral Bowles the same day made the following recommendation to the general manager:

> The facts disclosed do not justify me in placing full confidence in Mr. Ferris for the fulfillment of the very responsible position which he holds, and therefore I recommend that there should be sent to him to-day the inclosed letter. (Record, p. 1282.)

The letter referred to was as follows:

> DEAR SIR: Your letter of January 21 has received the careful consideration of the legal division and has been submitted to the vice president and general manager, and I am authorized to inform you that your resignation is requested, to take effect immediately. (Record, p. 1282.)

It is my understanding that all the circumstances relied upon as a justification for the report and my dismissal have now been produced before this committee. After reading the report and Mr. Stern's testimony before the committee, however, I am still in some uncer-

tainty as to the precise grounds for such action. They seem to rest mainly in suspicion founded on misapprehension.

There was no uncertainty, however, in the newspaper reports. They specifically charged me with accepting commissions from contractors and others in connection with Government work with which I was connected, and other misconduct. I quote an editorial from the Pacific Marine Review for March:

The events leading up to the resignation of Theodore Ferris as naval architect to the Emergency Fleet Corporation have not, as yet, been made entirely understandable to the general public. Mr. Ferris may be able to explain away some transactions that have a very nasty appearance. For the honor of the profession of which he is a member we sincerely hope that he can. The circumstances surrounding the case make it almost inexplicable. Theodore Ferris was a naval architect of ability and reputation and had enjoyed a highly lucrative practice for years, so lucrative indeed, that to the ordinary mortal it would have appeared certain that dishonest or even questionable dollars would long since have ceased to have interested him. This man was suddenly elevated to a post of honor and responsibility such as no naval architect has ever been called upon to fill, his net compensation was fixed at $2,500 per month, the reputation which the position entailed would insure Mr. Ferris of one of the most profitable practices in his profession throughout the entire world and this practice would have continued as long as he choose to remain in business after he had severed his connection with the Government. The integrity of a man in such a position would ordinarily be considered invulnerable and yet, if the contents of press dispatches are true, Mr. Ferris has stooped to the very meanest and lowest of professional practices. The profession of naval architecture has always been singularly free from scandal and for this reason we sincerely hope that the charges against Mr. Ferris will prove unfounded, or at least exaggerated, for, if they be true, they constitute the gravest and most sickening indictment that has ever been brought against a member of that profession.

In reading the record of the proceedings before this committee I am sorry to find that some of its members evidently harbor a suspicion that I have been guilty of these things. I respectfully urge upon the members of this committee in order to avoid the misapprehensions which I feel are responsible for what has happened that in considering my conduct in connection with the matters which have been brought up they endeavor to put themselves in my situation at the time and see the matters only as I saw them, without reference to circumstances as to which I had no knowledge or took no heed. Carelessness I may possibly have been guilty of, that is a matter of opinion, but I have not at any time been guilty of any wrong or improper act or purpose.

The Government wanted my services because I was practically the only naval architect who had specialized on merchant vessels, and I had collected a large amount of data on the subject and my vessels had been uniformly successful. I was reluctant to go with the Fleet Corporation, as Gen. Goethals wanted, not only because it was accepting a subordinate position in an organization after years of independent practice, but because of the serious financial sacrifice involved. After many lean years I had only recently come to enjoy the fruits of my efforts, and I had a family growing up to think of. The Government service was urged upon me, however, as a public duty, and I so regarded it. It involved a sacrifice by me for the time I was in the service of the Fleet Corporation of several times the amount of my compensation from the Fleet Corporation. I mention this because my compensation from the Fleet Corporation of $2,500 per month has been unfavorably commented upon. I find it even intimated that the 30 per cent allowance on wages to cover overhead

was merely a pretext for further compensation. Thirty per cent was the actual percentage of the overhead in my office for the preceding year. Under the conditions of my service for the Fleet Corporation the overhead exceeded 30 per cent, so that I am out of pocket.

From April 10, 1917, when I was first retained by Mr. Eustis, as agent for the Shipping Board, to prepare plans for the Government standard wood ships, the problems presented by my professional work for the Government absorbed all my time and energy. I gave to the Government work all the time I was physically able to stand, working an average of 16 hours a day, including Sundays and holidays.

CLINCHFIELD NAVIGATION CO. MATTER.

My appointment by the Fleet Corporation was dated April 27, 1917. I do not recall when it was received by me, but possibly not until Monday, the 30th.

In November, 1916, I was employed by A. W. Archer for a fee of 2 per cent to design and supervise the construction of four wood motor ships to be built by the Sloan Shipyards Corporation at Seattle, Wash. Subsequently the Clinchfield Navigation Co. acquired the contract for these motor ships, and confirmed my employment as naval architect for them upon the same terms. (Record, pp. 1268–1270.)

In February, 1917, at the request of the Clinchfield Navigation Co., I also began work on four wood steamships to be constructed at the same shipyards. The understanding as to these four ships was that I should receive a 2 per cent fee as in the case of the motor ships, but the formal letter was not received until March 31, 1917. This letter (record, p. 1267) provided for a fee of 2 per cent on the four steamers stated to be actually contracted for with the Sloan Co., in payment for my services as naval architect, as follows:

> This will confirm our understanding that you will for a compensation of 2 per cent of the total price of the four vessels, or a fee of $30,800, render services to this company in preparing model and lines for these ships, together with arrangement plans, also layout of propelling machinery, approve and pass upon all plans submitted by the builders, consult and advise with us, handle correspondence and other negotiations with the builders, acting as our representative, and further superintend the building of the ships and machinery, maintaining at your expense a resident inspector on the work.

The letter contained the further provision as follows:

> It is further understood that we have an option from the Sloan Shipyards Corporation for 12 additional duplicate steamers, and that in the event of our closing a contract for these additional vessels, you will perform similar services in regard to such steamers; but your compensation on these additional steamers will be reduced to 1 per cent of their total cost.

The letter mentions $385,000 as the cost of each of the four steamships. It does not mention the cost of the 12 additional steamers held under option; and the provision for a fee on these 12 steamers, being conditional on their subsequently being contracted for, never became effective.

When I appeared before this committee on January 3 I was asked whether at the time these ships were brought to the attention of Gen. Goethals by me I knew the price the Clinchfield Navigation Co. was to pay the Sloan Shipyards Co. for the ships, and I answered that I did not, which was according to my recollection. I was much

distressed to find later that the price of the four ships was mentioned in this fee letter of March 31. Upon reflection, however, I have no doubt that my answer was correct. I never knew the price of the 12 additional ships, and I am quite certain that at the time mentioned I did not recall anything about the contract price of the four ships. It had entirely passed out of my mind that it was mentioned in my fee contract, if, indeed, I ever noticed that fact. I had many such contracts, and I could not have told as to any of them whether the cost was mentioned. My employment usually preceded the letting of the contract for the ships, because plans and specifications were required for that purpose, and it was sufficient for me, in order to fix my fee to know the general character and number of the ships to be contracted for. Later a formal letter regarding my fee was usually passed as a matter of record, but it was not at all important to mention the cost in such a letter. It is quite likely that in any case I would be told the cost of the ships, but we were working on many ships, it was a time of rapid chages in prices, it was not necessary for me to carry such information in mind, and I did not do so. If I had wanted to know Sloan's price for these ships it would have been necessary to ask the Clinchfield Co.

I met Gen. Goethals with reference to going with the Fleet Corporation for the first time on April 14. I subsequently had two or three interviews with him prior to April 25 when I finally submitted my proposition as to services for the Fleet Corporation. In these interviews an important topic was as to where ships could be immediately constructed and particularly at that time wood ships; and Gen. Goethals wanted whatever information he could get about yards. I told him about the Sloan Shipyard, among others, and these wood ships to be built there. I did so solely because knowing something of conditions and the urgent need of the Government I considered it important in the interest of the Government that I should do so. There were only a very few wood shipyards where ships could be immediately placed. I knew the Sloan yard by reputation, and believed it to be a good one. I explained to Gen. Goethals at the time that the Clinchfield Navigation Co. were clients of mine, and that I was employed as their naval architect for the planning and building of these ships. Later Mr. Philip Sloan, who was in New York at the time, described the yard to me fully. I asked him about building ships for the Government, but his capacity was taken up with the Clinchfield ships. I then asked Mr. Barnett, vice president of the Clinchfield Co., about it. This was on April 23. He said he would be willing to turn the Clinchfield ships over to the Government. He did not name any price but said the Cunard Co. was inquiring for them and they were asking, I think, $150 a deadweight ton. I asked him to submit a written offer and thought it important enough to telegraph Gen. Goethals, which I did the same day, as follows:

Proposition offering here to-day American yard Pacific coast 20 wooden ships. Good builders. Prefer contract price per deadweight ton. Requested written proposition which I shall mail or present to you in Washington.

Later I received Mr. Barnett's written proposition addressed to me, dated April 23, 1917 (record, p. 1311) reading as follows:

We hereby offer to turn over the four motor ships and the four steamers which are now under construction for us at Olympia, Wash., by the Sloan Shipyards Corporation pursuant to your design, also a contract from the same builder for the construction 12 additional steamers to be duplicates of the steamers now under construction

Delivery of first two ships in September, 1917, and last ship 15 months from date of contract, at a price of $140 per dead-weight ton.

On receipt of this offer, I sent it to General Goethals with my letter of April 25 (record, p. 535), which I will quote here.

Referring to my telegram in reference to twenty ships on the Pacific Coast (good builders), I will explain that eight of these ships are now under construction from my plans for the Clinchfield Navigation Co. Inc., who are clients of mine. I wish to explain this so that my position in the matter is understood and will not be conflicting now that I am associated with you in the Government work. I have no interests in the ships except to represent my clients in the planning and building of the vessels. The same yard claims to be in position to undertake twelve more ships steam-propelled, and make delivery as stated in their proposition enclosed. If the matter is of any interest to you, I shall be pleased to render as much service as you may request.

On this date, April 25, I was not in the service of the Fleet Corporation. I did not send my proposal in regard to the same until this date, and did not receive my appointment until the 28th or 30th, but Gen. Goethals had, nevertheless, been discussing the ship program with me and I felt that he should be reminded of my relation to the Clinchfield Navigation Co. and these ships. I accordingly repeated in my letter what I had already told him verbally, that the Clinchfield Navigation Co. were clients of mine, and that I was representing them in the planning and building of the ships. My only thought was that this fact might affect my judgment and that he would understand that I was not making any recomendation and he was not to rely on me.

In view of the "conclusions" in Mr. Stern's report upon which my dismissal was based, discussed later, it should be noted that this offer of April 23 and my letter of the 25th, which inclosed it, taken together do fully disclose, in connection with my relations to the Clinchfield Co., the following things:

1. That the Sloan Shipyards Co., and not the Clinchfield Co., was the builder of the ships.

2. That the Clinchfield Co. claimed to have contracts and an option from the Sloan Co. for the building of all these ships.

3. That the Fleet Corporation was being offered an opportunity to acquire these contracts and option direct from the Clinchfield Co if it desired to do so.

4. That I, being employed as naval architect by the Clinchfield Navigation Co. to represent them in the planning and building of the ships, was by necessary inference to receive a fee for my services as such.

It did not disclose the amount I was to receive for such services as naval architect, nor the price of the boats to the Clinchfield Navigation Co. under its contracts and option with the Sloan Co., and this I will speak of later.

At an interview with Gen. Goethals in Washington some days after the letter of April 25 the Clinchfield ships were mentioned, and Gen. Goethals stated that they were acceptable. They were only briefly mentioned, however, and afterwards, on my return to New York, I found myself in doubt as to just what he meant and as to whether he might not be expecting me to do something in the matter. I, therefore, on May 1 sent him a telegram, as follows:

Referring to four wooden ships, steam-propelling amidships, coal-burning, now under construction at the Sloan Shipyards Corporation, Olympia, for the Clinchfield Navigation Co., and their offer to build 12 additional duplicate ships, all of which are

to my plans and specifications, and which you stated to me yesterday were acceptable, will I advise Clinchfield people to confer with Mr. Cotton regarding contract, and will you advise Mr. Cotton to this effect? Please wire instructions.

This telegram appears in the record (p. 1313) as sent on May 2, but it was sent according to my records on May 1. I received a telegram from Gen. Goethals in reply on May 3 as follows:

Referring yours Clinchfield Navigation Co., Mr. Brent made certain statements which prevent making contracts Pacific coast until after our plans and specifications for standard ship are in hands of prospective builders. Matter accordingly tied up until plans and specifications reach coast.

I regarded that as a rejection, as in fact it was, of the Clinchfield Navigation Co.'s proposition of April 23 to turn over to the Government their contracts and option with the Sloan Corporation.

I had nothing to do with this action, and was not consulted or informed in any way about it, but in possible explanation of it and of the action of the Fleet Corporation in subsequently making a contract direct with the Sloan Corporation, I find in the written statement submitted by the Sloan Shipyards Corporation, at page 1204 of the record, the copy of a telegram sent by Mr. Brent, vice chairman of the Shipping Board, to the Sloan Shipyards Corporation at Olympia, Wash., on April 16, as follows:

Shipping Board has to suggest that you perfect your plans promptly in order that you may be prepared to expand your plants to handle maximum amount of construction you have indicated it is your intention to undertake for Government without unnecessary delay when board is ready to let contracts.

It would appear from this and Gen. Goethals's telegram to me of the 3d, that Gen. Goethals had been in communication with Mr. Brent about the matter, and that Mr. Brent, who had been on the Pacific coast, had received a promise there from the Sloan yard to contract directly with the Government to build ships for it prior to my calling Gen. Goethals's attention to this yard.

I advised Mr. Barnett of Gen. Goethals's telegram of May 3, and did not hear of the matter again until May 7, when Mr. Barnett asked me for a letter of introduction to Gen. Goethals, stating that he wished to confer with him in behalf of the Sloan Corporation with reference to the latter building ships for the Fleet Corporation at its yard. He did not go into any particulars with me about the matter. It did not relate to the offer of April 23 by the Clinchfield Co., to sell out its contracts and option to the Government, but to a proposal in behalf of the Sloan Co., with which I had no connection, to build ships for the Government. I had done a great deal of work for the Clinchfield Navigation Co., and always found them square. The matter of price or terms or what sort of proposition it was proposed to make in behalf of the Sloan Co., was not discussed with me, but the Sloan yard was an important factor in the wood-ship situation, which I felt should not be overlooked, and I was glad to give Mr. Barnett the letter of introduction of May 7 (record, p. 535), which was as follows:

In view of the importance of the proposition of the Clinchfield Navigation Co. (Inc.), who represent the Sloan Shipyards Corporation, Olympia, Wash., an already equipped wooden yard, of good capacity, and with a reputation for building wooden vessels, I am taking the liberty of hereby introducing to you Mr. C. F. Barnett, vice president Clinchfield Navigation Co. (Inc.), who wishes to take a few minutes only of your time to confer with you in the matter of building the ships which I have spoken to you about.

I must admit that I did not at any time give this matter more than perfunctory consideration. It was on my mind that this yard with these ships partly under construction should not be allowed to escape attention, but my interest was in the problems presented by my technical work for the Government, which were absorbing all my time and energy. After giving Mr. Barnett the letter of introduction, I did not give the matter another thought nor hear anything more of it until May 18, when Mr. Barnett called at my office and told me that the Sloan Shipyards Corporation had a contract to build 16 ships for the fleet corporation. I asked what ships they were, and he told me the Government's standard 3,500-ton deadweight fir-wood ship. This was one of the ships which Mr. Eustis had employed me to design for the Shipping Board, and the plans and specifications for which I had just delivered to Washington to be issued from there as a Government standard type. Mr. Barnett asked me for the plans and specifications, a copy of which with my approval were required for attachment to the contract, and I told him that they had been sent to Washington. He explained that the contract included the four steamships already begun by the Sloan Corporation for the Clinchfield Navigation Co. There were a number of different sets of plans for standard fir-wood ships. There were plans with single-screw reciprocating engines, with twin-screw reciprocating engines, with single-screw turbine engines, and twin-screw turbine engines. I therefore wrote Gen. Goethals the letter of May 18, 1917, which appears at page 536 of the record, in order to make clear my understanding of the plans to which the contract applied and to provide for the four ships under construction being conformed to these plans, which appeared to be necessary. The four motor ships were not included. I had been consulted generally on the question of the Government going into motor ships and advised against it upon the ground that no American maker of internal combustion engines had yet made an overseas demonstration.

It has since transpired that before the Sloan Co. made its contract with the Fleet Corporation an arrangement was made between the Sloan Co. and the Clinchfield Co., which Mr. Philip A. Sloan describes in his testimoony here as follows:

Mr. SLOAN. This is where the release of the Clinchfield comes in. To get a release from the Clinchfield so that we could get a contract with the Shipping Board we had to refund to the Clinchfield, or return to the Clinchfield, an advance payment of $154,000 that they made on the first four steamers. Then, in consideration of the release of the option on 12 more, we paid them, on the basis of the commission that was in the agency agreement, 5½ per cent.

Senator NELSON. On the 16 ships?

Mr. SLOAN. No; on 12.

Senator NELSON. On 12, at $490,000?

Mr. SLOAN. At $490,000; but it was plus one-half per cent, making it 5½ per cent to act as our New York agents. Now, the consideration was based on an agreement for one year. That was 5 per cent. Then they were under obligations to Mr. Ferris for designing the whole lot of ships. They told me that as long as they were not going to go on with the boats I should stand half of Mr. Ferris's fee, which was 1 per cent. That would be half of 1 per cent for us, making a commission of 5½ per cent. (Record, p. 1162.)

Senator NELSON. Was there to be no commission, then, on the four steamers?

Mr. SLOAN. No; that was their profit.

Senator NELSON. That is, the profit between that you agreed to build them for and what the Government paid for them?

Mr. SLOAN. Less what it cost to make the changes. (Record, p. 1167.)

In order not to misjudge my position in this matter, there are one or two things which it is important to understand at this point.

1. One is that I never had any connection of any sort with the Sloan Shipyards Corporation. My connection was solely with the Clinchfield Navigation Co.

2. Another thing is that it is absolutely untrue that I was to receive a commission or compensation of any sort in connection with any contract secured from the Government. Such a thing was not only not thought of, but it did not occur to me that any one else would think of it. My connection with the Clinchfield Navigation Co. consisted solely of my previous employment by them as a naval architect for these boats under the terms appearing in the letters covering such employment, to which I have already referred and which appear in the record, and my only material interest was opposed to the intervention of the Fleet Corporation in the matter, because it would end such employment and prevent my earning my fees as the architect for these vessels.

3. And still another thing is that I had not the slightest inkling of the arrangements between the Clinchfield Navigation Co. and the Sloan Shipyards Corporation. I do not know what they had in mind in arranging to collect from Sloan a half of 1 per cent on the Government price for 12 ships on account of their contract with me as the naval architect for these vessels. They must speak for themselves as to that.

I only know that they did not consult me in regard to it, and that it was not in accordance with their actual obligations to me. I have never requested them for any settlement; but on June 26 the Clinchfield Co., of their own accord, paid me $11,200 under their contract with me of March 31. As I had already prior to my connection with the Fleet Corporation performed a substantial part of my services under this contract and incurred considerable outlay and the amount paid was, to say the least, not more than sufficient to compensate me for this, there was no reason why I should not retain the payment. They have not paid or offered to pay me anything since, and I have never had up with them in any way the question of any further payment in connection with these vessels. Admiral Bowles states that in January, 1918, he called up the Clinchfield Navigation Co. and asked them if they were expecting to pay me any commission or compensation on the 16 vessels building with the Sloan Shipyards Corporation, and that they said they were (record, p. 1282). This could only refer to the compensation under my contract of March 31. They have never, however, so stated to me or tendered any further payment. In my own view they owe me nothing in respect of the 12 ships because the agreement in respect of those ships was conditional on the Clinchfield Co. ultimately contracting for them, which it never did. In respect of the four steamers actually contracted for and begun it may be that inasmuch as they voluntarily released the Sloan Co. they technically owe me something, not only for the work actually done, but by way of compensation for the net fee I would have realized over expenses if the ships had been built. As a practical matter, however, in such circumstances, or where a ship is sold while under construction, I should be satisfied with any adjustment a client saw fit to make provided I was reasonably compensated for the services actu rendered.

I beg to refer now to the "conclusions" reached by Mr. Stern in his report which was made the basis of my dismissal.

Mr. Stern in this report, which appears at page 1282 of the record, referring to my letter to Gen. Goethals of April 25, says:

Mr. Ferris was not frank as to the compensation to be paid him by the Clinchfield Navigation Co. for the 4 steamers which the Sloan Corporation had contracted to build for the Clinchfield Navigation Co. or the 12 steamers that the Clinchfield Navigation Co. had under option to the Sloan Corporation. * * * This letter does not disclose that Ferris was to be paid anything by the Clinchfield Navigation Co. in the 4 steamers were taken over by the Fleet Corporation nor does it disclose that Ferris had anything to do with respect to the 12 steamers then under option to the Clinchfield Naviagtion Co., though, as a matter of fact, Ferris had an agreement for compensation. Mr. Ferris's agreement for compensation with respect to the 4 steamers and the 12 under option would have brought him over $70,000. Nothing that has been submitted by Mr. Ferris discloses that he intended to relinquish this compensation from the Clinchfield Navigation Co., except that, in conversation with Admiral Bowles, he so stated, but there are no other papers evidencing any such intention, and the letter written to us dated January 21, 1918, summarizing the situation and prepared with a great deal of care, does not so state, but it does show that he received $11,200 on account. Further, the Clinchfield Navigation Co. state that they expected to make Mr. Ferris further payments.

I am unable to understand Mr. Stern's point of view here, unless it is that he was under the impression, as in fact he states, that I was to receive the compensation referred to "if the four steamers were taken over by the Fleet Corporation."

Quite the reverse was the fact, however. If the steamers were not taken over by the Fleet Corporation I would be able to perform the services under my contract and earn my fees; but if they were taken over I could not do so. In the case of the four motor ships because they were not taken over by the Government, I was able to go on with my work on these ships and with earning my fee until they were subsequently sold to Calkins; and the Clinchfield Co. have paid me $18,600 out of my total fee of $28,600. It would have been to my interest, in the same way, to discourage and not to encourage the contract with the Government for the steamers.

As for Mr. Stern's criticism that my letter of April 25 does not disclose that I had anything to do with the 12 additional steamers nor that I had an agreement for compensation as to these, my explanation previously made to Gen. Goethals of my relation to the Clinchfield ships included all 20 ships without distinction, and my telegram of May 1 expressly states that these 12 steamers are also to my plans and specifications. Strictly speaking, however, I held no contract for these 12 steamers. The provision of the letter of March 31 as to these steamers is as follows:

It is further understood that we have an option from the Sloan Shipyards Corporation for 12 additional steamers, and that in the event of our closing a contract for these additional vessels you will perform similar services in regard to such steamers, but your compensation on these additional steamers will be reduced to 1 per cent of the total cost.

As will be seen from the terms of the letter, I had merely given an option on my services at a 1 per cent fee provided the Clinchfield Co. should ultimately close a contract with the Sloan Co. for them. Because of the Government's intervention they never did close a contract, or exercise their option with me, and I might better for my own interest, as was obvious, have discouraged the Government intervention.

I made no distinction of this sort, however, either in my talks with Gen. Goethals or in my own mind, but, as in the telegram of May 1, referred to myself as the naval architect for all of them. If the letter of April 25 fails to make this clear, it was unintentional. It was unquestionably understood by Gen. Goethals that I was representing the Clinchfield Navigation Co. as their naval architect for all 20 of these ships. And this included by necessary inference a representation that I was to receive a fee as such architect, for it is inconceivable that Gen. Goethals or anybody else would suppose that I was to perform such services for nothing. The main thing, however, was to advise Gen. Goethals of my friendly relations with these people, so that he would not look to me for any recommendation, and the matter of my fee was of no legitimate interest to the Government then, and would not be now, except for the fortuitous circumstance that the half per cent exacted by the Clinchfield Navigation Co. from the Sloan Co. in the name of my fee will indirectly come out of the Government payments to Sloan.

In regard to Mr. Stern's further comment, that nothing that has been submitted by Mr. Ferris discloses that he intended to relinquish his compensation from the Clinchfield Navigation Co., I have already explained that I am not entitled to any further payments except possibly a technical claim for damages in respect of the four steamers, which I have no idea of making. In February this year the Clinchfield Navigation Co. submitted a provision which they were asked to subscribe to in a contract between themselves, the Fleet Corporation, and the Sloan Corporation, providing for the payment, as I understand it, of the total amount of my fee into a fund, subject to determination as to whether such fund should go to the Fleet Corporation, to the Sloan Corporation, or to the Clinchfield Co., and the Clinchfield Co. asked my consent to their signing such a contract. The matter was referred to counsel, who replied in my behalf as follows:

FEBRUARY 5, 1918.

CLINCHFIELD NAVIGATION CO.,
24 Broad Street, New York, N. Y.

Attention of Mr. Bockus.

DEAR SIRS: We are indebted for your favor of the 4th, quoting a provision as to the fees of Mr. Theodore E. Ferris, which you say you were requested by counsel for the Fleet Corporation to insert in a tripartite agreement between the Fleet Corporation, the Sloan Corporation, and yourselves, and saying that you do not consider it proper to agree to this provision without the consent of Mr. Ferris. We must respectfully decline on behalf of Mr. Ferris to participate in any arrangement with the Fleet Corporation or the Sloan Shipyards Corporation in respect either of your obligations, if any, to Mr. Ferris as to fees or in respect of any arrangements you may have either with the Fleet Corporation or the Sloan Shipyards Corporation in regard to such fees. Whether Mr. Ferris has any further claim on you under his fee contract of March 31, 1917, has not been fully considered by us. We understand that you have released the Sloan Shipyards Corporation from its contract with you for the vessels with reference to which Mr. Ferris's contract was made, and it may be that Mr. Ferris has a claim against you for damages for failure on your part to build the ships with reference to which he had bound himself to render professional services. The Fleet Corporation, however, can have no interest which we can conceive of in requiring you to pay anything upon account of this fee into a fund as proposed, except upon the theory heretofore advanced by counsel for the Fleet Corporation that Mr. Ferris's arrangement with you in respect of his fees wrongs the Fleet Corporation, and that suggestion we must emphatically repudiate on Mr. Ferris's behalf.

Very truly, yours,

BURLINGHAM, VEEDER, MASTEN & FEAREY.

Subsequent to his report and my dismissal Mr. Stern appeare before this committee and stated his position in respect of this matte as follows (record, p. 1326):

Well, I merely go so far as to say this, Senator, that if it should turn out to be th case that this commission was made by Mr. Ferris without the consent of the Eme gency Fleet Corporation, the Emergency Fleet Corporation might well have the righ to claim that it was entitled to that because an agent is not entitled to benefit at th expense of his principal, and it is an elementary legal principle that the principal i entitled to any private profit that the agent may make.

I respectfully submit that there have been too many "ifs" in thi whole matter, which should have been disposed of before I wa pilloried before the country as dishonest and a grafter at the expens of my country in its time of need. If the counsel for the Fleet Cor poration would only permit themselves to see that any claim I ma have against the Clinchfield Co. in respect of fees has to do solely wit professional services not connected in any way with the Fleet Corpora tion, they would appreciate that they not only can not ask me t forego any claim which I may have against the Clinchfield Co., bu that they also can not ask me to collect anything to which I am no properly entitled, whether the Clinchfield Co. or the Sloan Corporatio is willing to pay or not. I beg to say, however, that, because unde the arrangement by which the Clinchfield Co. is to receive a half o 1 per cent on account of the so-called "Ferris fee" from the Sloa Corporation this money would indirectly come out of the Governmen payments to Sloan, if counsel for the Fleet Corporation will frankl admit that they are wrong in their inferences and that upon full con sideration of all the circumstances there does not now appear to b any ground for them, I shall be glad to do anything I can properly d to divert this payment to the Government.

Mr. Stern's report makes a further criticism in respect of my lette of April 25 as follows:

In recommending the Clinchfield Navigation Co. to Gen. Goethals, Mr. Ferris di not disclose with the frankness and definiteness that might be desired the fact th the Clinchfield Navigation Co. had a contract for four vessels, an option on 12 vesse which 16 vessels were subsequently contracted for between the Emergency Fle Corporation and the Sloan Shipyards Corporation. Subsequently, and perhaps as result of this, the Emergency Fleet Corporation, instead of directly negotiating wit the Clinchfield Navigation Co. for the sale of its contracts to the Fleet Corporatio entered into a contract with the Sloan Corporation under which it agreed to pay th Sloan Corporation $490,000 per vessel, whereas the Sloan Corporation was buildin them for the Clinchfield Navigation Co. for $385,000 per vessel.

I did not at any time recommend either the Clinchfield Naviga tion Co. or Mr. Barnett. On the contrary, I refrained from so doing or doing anything else to influence that matter. My letter of Apri 25, inclosing their offer, made no recommendation, and my letter o introduction of May 7 merely referred to the proposition of th Sloan Co. to build ships for the Government as important, which i undoubtedly was. So far as Mr. Barnett and his company wer concerned, it was a mere letter of identification.

The statement that the Fleet Corporation did not know of th Clinchfield contract and option is incorrect, as is also the inferenc that as a result of this it dealt directly with the Sloan Co. instead o the Clinchfield Co. As already explained, my letter of April 25 must of course, be read along with the Clinchfield Navigation Co.'s offe of April 23, which was inclosed with it. These explicitly state tha the Clinchfield Co. has a contract with the Sloan Co. for the fou

vessels and an option for the 12; and the offer is an offer to the Fleet Corporation to do the very thing which Mr. Stern's report says they might have done if they had known this. It is an offer by the Clinchfield Navigation Co. to turn over the steamers, which it states "are now under construction for us at Olympia, Wash., by the Sloan Shipyards Corporation: also a contract from the same builder for the construction of 12 additional steamers, to be duplicates of the steamers now under construction for us." Nothing could be plainer, it seems to me, than this statement that the Clinchfield Navigation Co. held contracts for these vessels from the Sloan Shipyards Corporation, and was offering the Fleet Corporation an opportunity to take them. This opportunity was turned down, apparently, as appears from Mr. Brent's wire of April 16 to the Sloan Co. and Gen. Goethals's telegram to me of the 3d, because of some understanding Mr. Brent, vice chairman of the Shipping Board, had already reached directly with the Sloan yard on the Pacific coast.

Mr. Sloan's comment is also incorrect in its further statements, that they entered into a contract to pay $490,000 each for vessels which the Sloan Co. was obligated to build for the Clinchfield Co. for $385,000. The Clinchfield Co. held a contract for only four steamers, at $385,000. The rest were under option at $140 per dead-weight ton, the same rate as that at which the Government price was figured. The Government contract, moreover, was not for the 3,200-ton Clinchfield design, but for a 3,500-ton Government standard design; a larger and more costly ship. Some doubt has been expressed by members of this committee as to the date of the Clinchfield option. I have only seen the copy, dated March 31, printed in the record (p. 1356), but the option is mentioned in my fee letter of March 31, and I know that that letter was received by me prior to April 3, because I acknowledged it on the latter date by letter of that date, which appears in the record (p. 1276).

Mr. Stern's comments, last quoted, therefore, are incorrect in every particular.

The furthet comment on the Clinchfield matter in Mr. Stern's report is as follows:

> Mr. Ferris knew, as he concedes, that the Clinchfield Navigation Co. was to have these vessels for $385,000 each. He must have known subsequently that the Fleet Corporation agreed to pay Sloan for these vessels $490,000, and it does not appear that he in any way protested or sought to serve the interests of the Fleet Corporation in the matter. (Record, p. 1283.)

Aside from the fact that the $385,000 applied to 4 only of the 16 Clinchfield steamers, and that the $490,000 was for larger and more costly ships, this raises a question of propriety which Mr. Stern later in his testimony before this committee put as follows:

> I should say, Senator, that if he thought it was betraying the interests of his clients to disclose information that he got as to the cost to his clients he should never have introduced his client. (Record, p. 1321.)

If this question had been presented in this way—if, for instance, I had had in mind the price of the four steamers to Clinchfield, and felt that Gen. Goethals should know it, but that I was not at liberty to disclose it, and the question had suggested itself as to whether in such circumstances I should bring the yard and these ships to Gen. Goethals's attention—I should have said it was the right thing to do. It can not be judged of with reference to later conditions when the

shipbuilding possibilities of the country have been largely disclosed, but must be judged with reference to conditions at that early stage when the urgency for ships was apparent, but we were all at our wits' ends to know where they were to come from. It was clearly of paramount importance that the Sloan yard and its situation as to these ships should not be overlooked, and the fact that I was not at liberty to tell the price to Gen. Goethals, so that the Fleet Corporation and its advisers would be in the same position as any other negotiator, would have seemed to me relatively unimportant.

I must admit, however, that the question of what was Sloan's price for the Clinchfield ships and of mentioning it to Gen. Goethals did not suggest itself to me at all, and that if it had I should not have hesitated to obtain it from Mr. Barnett and mention it to Gen. Goethals. I don't think the Clinchfield Co. would have had the slightest objection or considered that it had any bearing on the matter so far as they were concerned. For that matter, if Gen. Goethals or anyone representing the Fleet Corporation had considered it important, in my opinion, he could readily have ascertained it by asking Mr. Barnett. Indeed, except for the circumstance that the Fleet Corporation in all probability also regarded such information as having no bearing, there is nothing to indicate that they did not know the price of the Clinchfield ships. It has been merely assumed out of whole cloth that they did not.

The Fleet Corporation could not by any possibility have gotten the Clinchfield ships for $385,000 or anything like it, much less the 16 Government standard ships. They were offered the 20 Clinchfield ships, including the 4 motor ships, at $140 per dead-weight ton. This was the same as the option price for the 12 ships and showed an average profit to Clinchfield of $40,200 each for the 20 ships. If this price of $140 for the 12 ships was not the price under the option, and there was no price fixed, or if there was no option at all, the result is the same, for at that time no builder could afford to contract for less than $140, and none did. The market conditions for tonnage were well known. If the Fleet Corporation did not wish to hold the motor ships, it could have disposed of them, as the Clinchfield Co. did, within a few weeks for $500,000, or a profit of over $200,000 on the $140 price to the Government, and so brought down greatly the net cost to it of the remaining 16 ships. And if it did not then like its bargain for the 16 steamships, it could have unquestionably sold these also at an even greater profit. The Clinchfield Co. was demanding $150 a dead-weight ton for those from the Cunard Co. at the time they made their offer to the Fleet Corporation. If I had been consulted by anyone as to the purchase as a business proposition of these 20 ships on the terms of the Clinchfield offer to the Fleet Corporation, I should have advised it without hesitation.

The Fleet Corporation, however, saw fit to turn down the Clinchfield offer. The reason, I think, is obvious, and it was not any question of price. They were not buying contracts; they were letting contracts. Later when they came to the question of the ships under construction for others, they requisitioned them, but at that time they were apparently only considering the letting of contracts direct with builders. Mr. Brent had already been out on the coast to investigate conditions, and had made some tentative arrangement direct with

the Sloan Co. It was only a question, therefore, of what was a fair price at which to let a contract to Sloan at that time as an original proposition for the Government standard ship, having regard to conditions then existing. It was not intended to let contracts as low as possible. That would have answered, if it was a question merely of a few ships, but it was a question of the success of the whole ship program and the securing of the ships. It was necessary for the Fleet Corporation to consider for itself the matter of material and labor, machinery, and equipment for all these ships and the effect the building program would have on these. It was more important for the Fleet Corporation than for the Sloan Co. and other builders to know that the price was one at which the builders would be able to carry out their contracts with a reasonable profit such as to serve as an inducement to them to go into it.

If they knew, therefore, of the Sloan price of $385,000, for the Clinchfield Co. and even if the Sloan Co. had actually offered to build the ships for the same price, it would have been short-sighted policy for the Fleet Corporation to let the contract at such a price, for it was clear that a contract at such a price could not be carried out and would not produce the ships. I estimated when I was examined before this committee in January that there would be an additional cost to build the standard ships let to Sloan over that of the Clinchfield ships of $25,000 or $30,000. (Record, p. 538.) I see that the Sloan's estimate it as at least $50,000. (Record, p. 1160.) A careful estimate, however, shows, I find, a probable difference of not less than $70,000 per ship in May when the Fleet Corporation contract was let for 16 standard steamers, as compared with the contract price of $385,000 for the four Clinchfield steamers and option price of $448,000 for the 12 additional steamers at the end of March. The difference is made up as follows:

Diagonal strapping and increased fastenings	$15,000
Additional lumber, about 200,000 board feet used in the hull construction	10,000
Gun mounts, gun crew and other increased accommodations, plumbing, ice machine and cold storage plant	14,000
Advance in prices of materials, etc., as compared with March 31	30,000
Total	69,000

Applying this difference to the price of $385,000 for the four Clinchfield steamers and to the $448,000 option price for the 12 additional steamers would make an average price of over $500,000 for the 16 steamers, showing that the price of $490,000 for the 16 steamers in May was relatively lower than the Clinchfield price on March 31.

There is, further, one important factor which should not be overlooked. When the Clinchfield prices were made in March the Government ship program was not a factor. On May 18 it was threatening to disturb all conditions of labor, material, and everything else that entered into the construction of the ships, all of which had to be considered in fixing contract prices. So much so that it was necessary to a large extent to resort to the agency contracts because contractors were afraid to bid, and even where lump-sum contracts were secured it was necessary to provide for readjustment under certain conditions.

Other contracts let by the Fleet Corporation for similar ships about the same time the Sloan contract was let were even higher.

That with the Standifer yards, let previously, was at the rate of $142.86 with certain equipment to be supplied by the Fleet Corporation. The Traylor contract which followed the Sloan contract was also at $142.86. The Sloan contract was the lowest let, and the Standifer Corporation when it took a second contract in February, 1918, was given a price of $160 per deadweight ton.

It seems to me that it may be safely assumed that the advisers of the Fleet Corporation in this matter fully understood what they were doing in fixing the price for the Sloan ships, and that any protest or advice on my part on the score of price would have been deemed officious, especially as I did not know anything about the price until after the contract was closed.

JAHNCKE SHIPBUILDING CORPORATION MATTER.

The latter part of May the Submarine Boat Co. wished to employ me to prepare the detail plans for the so-called Ferris type of fabricating ship which they were proposing to build for the Government. They spoke to Gen. Goethals about it, and so did I. He said to both of us that any arrangement we might make regarding the work and my compensation would be satisfactory to him; that the Fleet Corporation was not entitled to my full time. This work for the Submarine Boat Co. was begun in May. Under date of June 8, 1917 Mr. Sutphen wrote me confirming the understanding that they would pay me my out-of-pocket expenses and expressing a desire further to pay me a fee. (Record, p. 1274.)

In September Admiral Bowles stated that he wished to arrange to transfer me from New York to Washington and to take my men over into the Government employ, and asked me to write him my views.

I wrote him under date of September 3 (Record, p. 1296), calling his attention to the terms of my arrangement with Gen. Goethals and the work I had been doing. I mentioned the Submarine Boat Co. work and that I had not received my compensation and had not solicited any, and that I was doing this work because I was anxious to develop the tonnage production on the fabricating method and vindicate my indorsement of that method. Referring generally to my work for the Government, I stated further as follows:

In fact, I did not go into the work from a monetary point of view, nor do I meet your wishes in coming to Washington with a view of financial gain, for I feel no money will pay any of us in the fight ahead to put over the proposition we are undertaking. Therefore, I leave this matter in your hands to adjust as you see fit, excepting I wish to carry on my New York office work in the future so far as it applies to the corporation in the same manner as at present, and further ask in view of the fact that I increased my office space very materially with a view of carrying on the corporation's work at New York, some consideration must be given to the term of lease I now have on an office which would not have otherwise existed and which I am now obliged to carry in view of the present contemplated change in plans. (Record, p. 1297-1298.)

Admiral Bowles replied to me under date of September 6 (record p. 1295), in part as follows:

These conditions will also refer to the fabricated ship construction in which I consider it absolutely necessary that you should maintain your interest and supervision. However, it will not be possible for you to receive compensation for any work done in this matter from any company acting as agent or contractor of the Emergency Fleet Corporation. Where you have existing contracts with owners for the design and supervision of vessels under construction which have been requisitioned, you will be

permitted to carry these out with the understanding that they do not conflict with the affairs of the corporation. * * *

I have no objection to the continuation of your private business in New York and the retention by you of your present clientele, provided the corporation's business has the preference and that you shall give your time to it preferentially with the understanding that your private business will not in any way conflict with that of the corporation.

The Fleet Corporation contract with the Submarine Boat Co. was not actually signed until September 14, after Admiral Capps became general manager. I then called his attention to the work I was doing for the Submarine Boat Co. and the question of compensation in connection therewith. He approved of my proceeding with the work, but took the position that it should be understood that the work was done on the same terms as the work for the Fleet Corporation. (Record, p. 1274.) I made no objection to this, as I considered it of the greatest importance for the Government interests that this work, which was a development of the fabricating idea, having an important bearing on its success, should be under my supervision and expedited as much as possible; and I considered the matter of any compensation to be relatively unimportant, although this work had been undertaken and was half completed pursuant to the understanding with Gen. Goethals, which I have mentioned, and it was clearly not the right of the Fleet Corporation under its contract with me to require me to do such work for contractors without additional compensation.

After Mr. Jahncke secured his contract he came to me, I think about the latter part of October, in order to discuss with me the question of making the necessary modifications in the Submarine Boat Co.'s plans, so as to provide for reciprocating engines instead of turbine engines, the ships which he had contracted for being for reciprocating engines, whereas the Submarine Boat Co.'s ships were for turbine engines. Mr. Jahncke had no drafting force of his own, and it seemed to me practically necessary that this work should be looked after by us. As I understood the position taken both by Admiral Capps and by Admiral Bowles, there was not any question as to the propriety and desirability of my doing such work, provided it was done under the terms of Gen. Goethals's letter as to actual cost and overhead. I therefore told Mr. Jahncke, who wanted to know if he could be taken care of in my New York office, that I thought he could; and we made an estimate of what the actual out-of-pocket expense with the overhead would amount to on the same basis as under my arrangement with the Fleet Corporation, without any fee or compensation for myself. This interview with Mr. Jahncke was at New York, and at the same time I instructed my head man there, Mr. Dornin, that any of this work we did for Mr. Jahncke was to be charged to him on this basis.

After that, however, the matter dragged along for a month or more in an effort on Mr. Jahncke's part to obtain from the Submarine Boat Co. their shop drawings without success. Mr. Jahncke told me, and I understood it to be correct, that the Fleet Corporation had promised him that he should have these drawings. I find in the record an intimation that I might have conspired with Mr. Sutphen to prevent Mr. Jahncke from getting these plans in order that I might get a job from Mr. Jahncke. It is difficult for me to believe that this was intended seriously. I do not know exactly what the difficulty was in securing the plans from the Submarine Boat Co.

These were the fabricating shop drawings which were being made by the Submarine Boat Co., and not the detail ship plans which were being prepared in my office. I did all I could to induce Mr. Sutphen to furnish the plans, and recall that on one occasion I invited Mr. Jahncke and Mr. Sutphen to dine with me, and it was my understanding that the matter was fully arranged at that time. I note from Mr. Jahncke's statement (record, p. 1482) that he claims that an agreement was reached by which he was to get the plans at $1,000 a ship or $6,000 altogether. It is to be noted in this connection that according to Admiral Bowles' letter to me of December 5 (record, p. 1293), it was his contention that anything paid by Mr. Jahncke to the Submarine Boat Corporation should be credited to the Fleet Corporation, so that indirectly Mr. Jahncke was really dealing with the Fleet Corporation as to the price to be paid for these Submarine Boat Co. drawings. From Admiral Bowles' telegram to Mr. Jahncke of November 28 (record, p. 1486), it would sppear that the matter was finally arranged with the Submarine Boat Co. through Admiral Bowles at $2,000 a ship. It is conceivable, therefore, that some question of adjustment of the terms between the Boat Co. and the Fleet Corporation may have had something to do with the delay in the matter.

On November 21 my head man, Dornin, rang me up from New York and said that Mr. Jahncke's engineer, Guerin, was there and tried to explain something which they had under discussion. I was unable, however, to understand it and said it must wait until I came to New York. The next evening, however, Dornin turned up in Washington and tried to get my consent to some plan he and Mr Jahncke's engineer, Guerin, had discussed in view of the latter's inability to secure the Submarine Boat Co.'s drawings. I was too preoccupied to give the matter much attention and refused my consent. As far as I understood the proposal, it was to prepare new drawings which would be necessary because of the inability to secure the Boat Co.'s drawings, and in connection with this to modify the design in some way, which Dornin claimed was an improvement, at a cost to Jahncke of $20,000. Dornin admitted that this sum would not quite cover the actual cost of doing the work. I refused to consent. Dornin came back again the same evening and made another effort to get me to consent, stating that Guerin urged that Mr Jahncke was in a hole because of his inability to get the Submarine Boat Co. plans, and that we should help him out. I told Dornin that I would try to help Mr. Jahncke out somehow in the matter, but I could not give it any attention then and that it would have to wait until I came to New York and could look into it. This was about 11 o'clock in the evening. I was at the office deeply absorbed in the matter of the model for the 8,000 ton cargo troop ships which had not worked out properly and required some modification. In saying that we would help Mr. Jahncke out in some manner it was my belief that they would still be able to secure the Boat Co.'s drawings, and notwithstanding it was work that I was not required to do under my contract with the Fleet Corporation, I was willing to have my New York office handle it under my arrangement with the Fleet Corporation for the actual cost without any compensation to myself.

I did not hear any more of the Jahncke matter until I made a trip to New York about the last of November. I then found that Messrs.

Dornin and Guerin had between them signed a memorandum November 23, 1917 (record, p. 1286), subject to confirmation Jahncke and myself. I destroyed the document and told Mr. to hold up on the work. Practically no work, however, ha done. I questioned Dornin as to what he had in mind in signi memorandum with Guerin and he explained to me that the fabr for the Jahncke Shipbuilding Corporation were the Virginia Co. and that this company preferred to use the regular ship instead of ordinary structural shapes which the Submarine B were using, and that this fact would permit giving a crown deck which was not possible in the case of the ships as designed Submarine Boat Co. The modifications Dornin wanted to mal in fact an improvement on the Boat Co.'s design. I made a calculation of the actual out-of-pocket expense of these propos plans and found that they would certainly exceed the $20,00

I left for Washington on the evening of December 4, inte take up Mr. Jahncke's troubles with Admiral Bowles as soon a ible. On my arrival at my office the next day, however, I f letter from Admiral Bowles, dated December 5 (record, p. stating that Mr. Jahncke had called and had stated that his pla being prepared by me and that I must have overlooked his l September 6, in which he stated that it would not be possible to receive compensation for any work done in this matter fr company acting as agent or contractor of the Fleet Corpo (Record, p. 1293.) At the same time, however, he sent me a randum approving of my going on with the work upon the b cost and overhead under the terms of my arrangement with th Corporation. (Record, p. 1293.) This was precisely what I mind to do for Mr. Jahncke, and, as I understood it, quite in ance with my arrangement with the Fleet Corporation. The q was purely one of my receiving compensation additional to co overhead.

The provision in Admiral Bowles' letter of September 6, whi in reply to my letter of the 3d, was as follows:

> These conditions will also refer to the fabricated ship construction in consider it absolutely necessary that you should maintain your interest an vision. However, it will not be possible for you to receive compensation for a done in this matter from any company acting as agent or contractor of the En Fleet Corporation.

This had reference more particularly to such cases as the Sub Boat Co. work, which was especially mentioned in my letter of and had been discussed with Admiral Bowles.

I was in doubt whether Admiral Bowles meant me to proce the Submarine Boat Co. design modified for reciprocating ma or with Dornin's modified design which Mr. Jahncke's engin sought to arrange for, and which, presumably, Mr. Jahncke mind in talking with Admiral Bowles. I therefore wrote A Bowles on December 7 (record, p. 1292), asking which was in and calling his attention to the fact that under the modified d suggested by Dornin it was proposed to put a crown in the d cut the depth of the ship, which was advantageous. It was that this might involve some saving in cost. Admiral Bowl on December 8 (record, p. 1292), asking about I practical, however, to form any estimate of this

proceeded far enough to procure the approval of the Classification Society. As soon as this was done I wrote Admiral Bowles on December 14 (record, pp. 1288–1289), stating that it was difficult to make any estimate, and that I was in doubt, but that there might be a difference of about $10,000 per ship, and asking whether in view of the increased deadweight capacity upon which the price of the ships was figured there should not be a credit against this decrease in cost. This matter of difference in cost, however, as I understand it, is unimportant. I am in considerable doubt as to whether there will be any saving in cost, but, in any event, I find that it is a matter which is fully provided for by the provisions of the contract, so that the Fleet Corporation would be absolutely entitled to the adjustment of any difference in cost.

It is quite certain that neither Mr. Jahncke nor his engineer could have had any such saving in mind, for no one could have told if there could be any saving as an actual result and in any view they must have known that the benefit would go to the Fleet Corporation under their contract.

When this whole matter is considered it seems to me it must be apparent that there could not, in any point of view, have been any wrong intent on my part. The question is not as to whether I contemplated arranging with Mr. Jahncke to help him out with his plans, but whether I intended to obtain a fee for myself over and above the cost of doing the work, contrary to my understanding with Admiral Bowles. Under the arrangement which Dornin and Guerin sought to make the $20,000 would concededly not have covered the actual out-of-pocket cost of the work, and even if I had been willing to contribute a part of the expense of Mr. Jahncke's plans the fact that I was making the plans could not possibly have been concealed. The contract provisions gave the Fleet Corporation any possible saving in cost, and the only one out of pocket would have been myself. These same plans will actually cost upwards of $30,000 at the least, so that under the Dornin arrangement I would have been out of pocket about $10,000. Aside from any question of propriety I am not accustomed to making such business arrangements.

In Mr. Stern's report to Admiral Bowles of January 23 (record, p. 1282), the comment on this Jahncke matter is as follows:

> On September 6, 1917, Admiral Bowles notified Mr. Ferris that it would not be possible for him "to receive compensation from any work done in this matter (fabricated ship construction) from any company acting as agent or contractor of the Emergency Fleet Corporation." Nevertheless, Mr. Ferris's New York office agreed to prepare plans for the Jahncke Shipbuilding Co., to be used under its contract with us, and to accept in payment therefor $20,000. These plans actually resulted in a saving in cost to the Jahncke Shipbuilding Co. over the cost of the plans as originally intended. Mr. Ferris claims in his letter of January 21, 1918, that he instructed his office to withhold action on the preparation as soon as he learned of the placing of the order for the plans and that upon his return to New York he directed that the order be not accepted.
>
> In view of the order of Admiral Bowles in his letter of September 6, 1917, and of the relationship of Mr. Ferris to the Emergency Fleet Corporation, there would seem to be no reason why Mr. Ferris should have delayed rejecting the order for the plans. But the facts and circumstances presented to us go further and indicate that the order was taken with Mr. Ferris's consent.

The facts and circumstances referred to, I presume, are that Mr Guerin said that Mr. Dornin said that Mr. Ferris said he consented But when it is understood that there was every reason in the interest of the Fleet Corporation why this work should be done for Mr. Jahncke

that there was under my arrangement not the slightest reason why I should not undertake it, provided it was undertaken on the terms of my arrangement with Gen. Goethals, that both Admiral Capps made no objection to this in the case of the Boat Co., and Admiral Bowles made no objection in this case when it came to his notice, and both recognized the importance of my keeping supervision over this fabricating work, and that the only objection was to my receiving a fee in addition to the cost of the work; that under the Jahncke contract any possible saving in cost would go to the Fleet Corporation, and not to Mr. Jahncke, so that the corporation would not only have the benefit of the increase in deadweight tonnage, but the saving in cost also; that the $20,000 was understood even by Dornin and Guerin to be less than the actual cost of the work, it is difficult to see where there was any room for wrongful purpose to exist.

The only actual difference between the arrangement as planned by Guerin and Dornin and that approved by Admiral Bowles is that under the former, in respect of which I am charged with a wrongful intent, I would have been out of pocket some $10,000 which under the latter arrangement falls on Mr. Jahncke.

Instead of seeking at any time throughout my connection with the Fleet Corporation to benefit improperly, quite the reverse has been the fact. About the very time that this Jahncke incident occurred I turned over to the Fleet Corporation all the design and detail drawings of the standard 8,800-ton ship which I had prepared in 1916. These plans were my property and could have been sold by me for thousands of dollars. The Fleet Corporation adopted them as its standard 8,800-ton ship and have sold the plans to contractors, once or oftener at least, for $5,000. These plans were worth at least $12,000 to $14,000. I also turned over the plans which I had prepared in 1916 for the standard lake ship, which had a value of not less than $3,000. These were also adopted as a Government standard ship. I also turned over to the Fleet Corporation the plans for a 7,300-ton ship designed by me in 1915, of the value of at least $5,000. This was also adopted by the Government and contracts have been let. Later Admiral Bowles offered to pay me for the 8,800-ton ship, but I declined to accept any payment either for this or the other plans. I wrote him on January 14, 1918, as follows:

> It was very thoughtful of you to suggest that I be compensated for the design and detail information of this ship; but as mentioned to you I do not care to accept same, for this would be inconsistent with the spirit and purpose I have worked for the corporation, to turn over to them the various information in regard to all matters pertaining to cargo ships which I have accumulated for many years, the amount of which I do not believe was possessed elsewhere, exerting every effort on my part to render the best that was in me for the good of the cause for which we are all working. This also applies to the design, arrangement, drawings, etc., of the 5,650 ton spliced lake type of ship, which information is also now in the hands of the corporation for the purpose of also making this ship a standard should same be called upon for construction.
>
> I do, however, and this I feel of course will be understood, wish to be free to use the design and details of these ships at a future time when our work is over as they might be called upon for use or handed over to my clients in my private business.

In the matter of the requisitioned ships I am also considerably out of pocket, notwithstanding that in Admiral Bowles's letter of September 6 it is expressly provided as follows:

> Where you have existing contracts with owners for the design and supervision of vessels under construction which have been requisitioned, you will be permitted to carry these out with the understanding that they do not conflict with the affairs of the corporation.

In the case of all the requisition ships the Fleet Corporation has directed that no payments be made to me upon account of my fees under the contracts which I had with the owners. In the case of the Ward Line ships *Oriente* and *Orizaba*, in particular, I have in consequence of this received only $14,800 on account of my fee of $30,000, whereas my actual out of pocket expense on account of these vessels has been about $25,000. It is a fact that I have given my best to the Fleet Corporation and disregarded my own interest throughout, and in return have been dismissed not only without thanks, but charged with being unworthy.

I regret to say that Mr. Dornin, whom I had hoped to have here, has been ill and confined to his house since January, and that his attendance can not possibly be secured. I obtained his affidavit however, which I will ask to have read.

STATE OF NEW JERSEY,
County of Orange, ss.

Thomas Bernard Dornin, being first duly sworn, deposes and says:

I am 40 years old, a native of Virginia, and since September, 1917, have been in charge of the New York office of Mr. Theodore E. Ferris, naval architect. I am naval architect and practical shipbuilder, having started in business over 22 years ago.

In respect to the matter of making plans for the Jahncke Shipbuilding Co. of New Orleans, La., I have the following to say:

In October or early November, 1917, Mr. Ferris told me that the Jahncke Shipbuilding Co. had been given a contract to build some 5,000-ton ships and that the Jahncke Co. would use the shop or detail plans which had been made by the Submarine Boat Co. for their 5,000-ton fabricated ships. These plans required modification to make them usable by the Jahncke Co. because the machinery in his ships was to be entirely different from that to be installed by the Submarine Boat Co. Had the Jahncke Co. succeeded in obtaining plans from the Submarine Boat Co. over half of such plans would have had to be made over. Mr. Ferris told me at this time that, if we made these modifications, the cost of this work would have to be charged to the Jahncke Shipbuilding Co.

Mr. Ferris's New York office had made the original guide or ship drawings from which the Submarine Boat Co. developed their shop or detail plans, and our office had these ship drawings, and were familiar with every phase of the work. We heard nothing of a definite nature, however, at the New York office, regarding the Jahncke matter until November 21, 1917, when Mr. L. H. Guerin, chief engineer of the Jahncke Co., came to Mr. Ferris's office and told me he was going around to the Submarine Boat Co. to arrange for us to have all the shop plans of said company so that we could start making the required modifications. Later in the same day, he returned stating that the Submarine Boat Co. refused to give him any plans. He seemed very much surprised at this action, as he had thought all arrangements had been made for him to get the plans. He asked my advice as to how to proceed, and I advised him to go at once to Washington and take the matter up with the Shipping Board, getting a formal order from that board for the Submarine Boat Co. to deliver the plans. Mr. Guerin, however, said he would wire Mr. Jahncke and would try again next day to get the plans. The next day Mr. Guerin came into my office as mad as a hornet, and told me the Submarine Boat Co. still refused to let him have the plans. He said he was through trying to get their plans and asked me if we could make him a full set of plans by which to build their boats. Mr. Guerin said nothing about a modified design. I told him I thought we could do this work, but that, if we did, I was going to produce a much superior ship to the ones he had intended building.

Mr. Guerin asked me what the plans would cost them, and I sat down and figured it out. The total actual cost of production, without any profit to Mr. Ferris, I figured to be about $24,000. I suggested to Mr. Guerin that we do the work for him on the basis of the cost of wages and supplies, plus 30 per cent, to cover overhead expenses such as office rent, etc., this being, as I understood, the same basis upon which it was to be figured under the arrangement of Mr. Ferris with the United States Shipping Board.

Mr. Guerin did not want to do this, and said that he could not pay over $20,000. He asked me to put the matter before Mr. Ferris by telephone and try to get his consent. I telephoned Mr. Ferris, who was in Washington, but he could not understand what I was trying to explain, and told me the matter would have to wait until he came

to New York. I reported Mr. Ferris's inability to understand me to Mr. Guerin. He said he couldn't wait until Mr. Ferris came to New York. Mr. Guerin then begged me to go to Washington with him and try to get Mr. Ferris's consent. This I did, reaching Washington about [illegible] on November 22.

My reasons for being so anxious to urge Mr. Ferris to take the contract were about as follows: The Jahncke people were hustling live people anxious to make a record, and willing to be guided by our advice. Because of Mr. Ferris's absence from his New York office, caused by his work for the Shipping Board in Washington, the matter would have been chiefly in my hands. The fabricators from whom the steel for these ships was to be secured had one of the best shops in the country and were especially experienced in multiple punching. A new design of a ship for the Jahncke people, or rather a modification of Submarine Co.'s design, gave me an opportunity to take advantage of this experience of the fabricators and to develop freely a number of improvements and make a better ship. I felt sure that the boat we should develop would be far superior to the old boats. Inasmuch as the accomplishment of these results would be due to my personal effort, it would aid materially in establishing my reputation as a naval architect. I felt that if the boat which I had in mind was developed into a success, I would never have to worry about a job. My connection with Mr. Ferris was not permanent, and if work ran out in this office, I was free to go elsewhere. I was free if the opportunity offered to go with the Jahncke people and assist them in the development of this new ship.

After my arrival in Washington, as stated, at about [illegible] p. m., on November 22, I left Mr. Guerin at the Ebbitt House at about 9 o'clock and went to the Munsey Building to see Mr. Ferris, who had his office in that building. He was very busy and I did not get a chance to talk to him of the object of my visit until about 10 o'clock, when I simply related the failure of Mr. Guerin to get the Submarine Co.'s plans and told Mr. Ferris of Mr. Guerin's proposition for us to make a complete set of plans for a modified ship, which should cut out the bad features of the other boats. I told Mr. Ferris that $20,000 was very little money for the work, but that I thought we could squeeze by on it. I told him I was personally very anxious to do the work. Mr. Ferris seemed to be thinking of something else most of the time I was talking to him, but, as he is very absent-minded, I paid no attention to this. He refused his consent to my taking the work, and I left to report to Mr. Guerin. Mr. Guerin said he simply must have the plans, and he asked me to go back to Mr. Ferris and ask him to make them, telling Mr. Ferris what a bad hole the Jahncke Co. was in, and asking him to please help them out. I thereupon returned to the Munsey Building and saw Mr. Ferris again about 11 o'clock. I urged him strongly to let me take the work for our office, telling him Guerin's position and what Guerin had told me. Mr. Ferris thought a while and finally told me he would go fully over the whole matter when he came to New York in the next few days, and that he would see if there was any way in which we could help Jahncke out of his hole. He said Jahncke seemed to be a hustler, and it was a shame for him to be held up about his plans. I gained from Mr. Ferris no more distinct impression than that he contemplated doing something to help Jahncke out of the hole that the company was in. Mr. Ferris gave me no impression as to what he had in mind to do. I left him, however, under the impression that we were about sure to make the plans, and it was only a question of what arrangement we should work under. I went back to the Ebbitt and found Mr. Guerin about ready for bed. I told him we were going to make the plans, and that he could sleep easy in his mind. I did not tell him that Mr. Ferris had agreed to do the work, but I think Mr. Guerin got this impression and I did nothing to disabuse his mind.

The next morning, November 23, I went to the technical and purchasing departments of the Emergency Fleet Corporation, but saw nothing further of Mr. Ferris. When I got back to the Ebbitt, I found Mr. Guerin had written up a memorandum of agreement, intending that he and I should sign, but at first I objected, as the memorandum spoke of me as the authorized representative of Mr. Ferris, which I was not, and I told Mr. Guerin that I was not. I finally signed the memorandum, however, since it provided that it was to be confirmed by Mr. Ferris, and I understood it was only a tentative outline of the terms and conditions of a contract which Mr. Guerin and I would get our principals to sign. I left for New York at noon of that day without seeing Mr. Ferris, and he did not know about the memorandum agreement I had signed until he came to New York later. Meantime it was placed in the safe at the New York office.

On Monday, November 26, I received a wire from Mr. Guerin, dated Washington, November 24, as follows:

"Fleet Corporation almost orders getting and following submarine plans. Await further notice before proceeding our arrangement. Leaving for New Orleans tonight."

Nothing further was done about the plans for the Jahncke boats until the last c November or the 1st of December (I do not remember the exact date), when Mr. Ferri came to New York. He then saw the agreement I had signed, and I asked hin whether we were to go ahead on the Jahncke ship or not. He told me to hold up o the work, and said he had destroyed the memoradum and there would not be an agreement. He left for Washington several days later.

I do not remember the exact date on which we were subsequently authrized to g ahead with the plans, but it must have been about December 6 or 7. Up to this time with the exception of some little work I had done personally, amounting perhaps t $50, absolutely nothing had been done on the modified design.

THOMAS BERNARD DORNIN.

Subscribed and sworn to before me this 21st day of February, 1918:

[SEAL.] FREDERICK J. HOWLETT,
Commissioner.

(Thereupon, at 3 o'clock p. m., a recess was taken, to enable th members of the committee to answer a roll call of the Senate.)

Senator CALDER. Mr. Chairman, Mr. Ferris's statement is just abou half finished. I wonder if there would be any objection to having th rest of his statement printed in the record without his reading it and any members of the committee can now ask him any question that they have in mind relating to this controversy—or whether it wa thought best for Mr. Ferris to read all of his statement to the com mittee.

Senator RANSDELL. It seems to me that it would be just as well t have the statement printed without Mr. Ferris reading the rest of i if he will explain to the committee briefly that portion of his statemen dealing with the question of why it was that the contract price of thos ships was raised from $385,000 to $490,000. That is the thing that i hardest for us to understand. I assume that it is covered by Mı Ferris's prepared statement; in fact, during the recess I asked Mı Ferris about that, and he said the subject was fully covered in hi statement. If he will explain about that, I would not object to any thing he submits being printed in the record.

The CHAIRMAN. You have not reached that subject in your state ment yet, have you, Mr. Ferris?

Mr. FERRIS. Not quite, Mr. Chairman.

The CHAIRMAN. I think it will be just as effective if the statemen is all printed in the record without Mr. Ferris reading the rest of it the members of the committee, of course, will read his statemen in the record with just as good effect as if it was read to them, an perhaps better.

Senator VARDAMAN. Yes; I think so, Mr. Chairman. I was com pelled to be absent part of the time, and I have not heard all that h read.

The CHAIRMAN. Then Mr. Ferris's entire statement will be inserte together, as one continuous statement, in the record of to-day' hearing. Have any of the members of the committee any question to ask Mr. Ferris?

Senator RANSDELL. Let me ask you this question, Mr. Ferris, if i will not embarrass you. Will you state, in your own way, in addi tion to anything you have in your prepared statement, why it wa that there was no objection on your part to the contract prices fo the ships to be constructed by the Sloan Shipyards Corporatio being increased from $385,000 to $490,000, and whether or not tha price of $490,000 was an improper price, or a higher price than wa paid in similar contracts for similar ships?

Mr. FERRIS. It was a lower price than was placed, as a rule, on similar ships for the Government.

Senator RANSDELL. The price of $490,000 was lower?

Mr. FERRIS. Yes, sir. That figures $140 a dead-weight ton. Before that, the price of the Standifer Co. contract was $142.80 a dead-weight ton.

Senator RANSDELL. What caused that raise in price to $490,000?

Mr. FERRIS. The difference in the market. Lumber went up in price, the cost of labor went up, and then there was the difference in the type of ship.

Senator VARDAMAN. May I interrupt there? What was the difference in time between the two contracts?

Mr. FERRIS. It was from March until May.

Senator VARDAMAN. From March until May?

Mr. FERRIS. Yes; and Mr. Brent had been out on the Pacific coast, and there was agitation to the effect that he was going to build 1,000 wooden ships; and the lumber market went up; the prices of all materials and labor went up.

Senator RANSDELL. Can you tell the committee, approximately, if you have not exact figures, what was the increase in the price of lumber and in wages?

Mr. FERRIS. Lumber was about $15 a thousand feet.

Senator CALDER. Additional?

Mr. FERRIS. Yes, sir. And I suppose the cost of labor went up 15 or 20 per cent.

Senator RANSDELL. And about how many thousand feet of lumber are there in a ship of that character?

Mr. FERRIS. About 2,000,000.

Senator RANSDELL. Two million feet?

Mr. FERRIS. Well, 1,800,000 feet would be nearer.

Senator RANSDELL. And the price of that went up an average of from $15 to $20?

Mr. FERRIS. No; but $15 to $17.

Senator VARDAMAN. Well, how much does that figure on a ship?

Senator CALDER. At $15 a thousand, it would be $30,000 more for the lumber in one of those ships.

Mr. FERRIS. Yes, sir. The increase figures out about $70,000 a ship, due to the change in the design and the increase in prices.

Senator RANSDELL. Well, that does not account for the total difference between a price of $385,000 and a price of $490,000 for a ship; that is a difference of $105,000. How do you account for the additional increase?

Mr. FERRIS. The additional increase would be due to a profit under a condition.

Senator RANSDELL. A profit under a condition?

Mr. FERRIS. Yes; you see Gen. Goethals arranged those contracts for the 16 ships.

Senator RANSDELL. Did you have anything to do with them at all?

Mr. FERRIS. Nothing at all.

Senator RANSDELL. You were not consulted about it?

Mr. FERRIS. Not consulted at all; it was all done here in Washington. I was in New York. I did not know the contracts had been closed until they came to my office for the plans and specifications of the ship, and I had sent the Government plans to Washington previous to that.

The CHAIRMAN. What change had to be made in the design of the ship?

Mr. FERRIS. Diagonal strapping was put on all the ships, the dead-weight tonnage was increased, and then they changed the gun mount and the gun crew accommodations were additional. The whole thing runs up, in view of the change in market conditions, to about $70,000—at least that would be a low estimate.

The CHAIRMAN. What was the difference in dead-weight tonnage of the two types of ship?

Mr. FERRIS. Three hundred tons.

The CHAIRMAN. Three hundred more or 300 less?

Mr. FERRIS. I mean the Government type ship was 300 tons more. And it is really fair to figure that value in in accounting for the difference in cost.

The CHAIRMAN. I should think that would have a material effect on the cost.

Mr. FERRIS. It meant a bigger ship. The Government ship, the regular firwood ship, was 3,500 tons, while the ships contracted for were 3,200 tons. And although I did not figure that in in accounting for the $70,000 difference, I think that rightfully that increased dead-weight should be figured in.

Senator CALDER. Was the price finally agreed upon, $490,000, for those ships the lowest price of any ships built at that time for the Government?

Mr. FERRIS. Yes, sir.

Senator RANSDELL. Were there many ships built at that time at a higher price than that per ton; any considerable number? That is, I mean wooden ships.

Mr. FERRIS. Yes, I should say 40 or 50 ships.

Senator RANSDELL. Out on the Pacific coast?

Mr. FERRIS. Yes, sir.

Senator VARDAMAN. May I ask a question there? Was the Shipping Board or the Emergency Fleet Corporation informed as to the price that the Sloan Corporation was to build the ships for—the contract that was transferred to the Government? Did they know of that?

Mr. FERRIS. No.

Senator VARDAMAN. They did not know of the increase of $105,000 a ship, then?

Mr. FERRIS. I do not know about that. I do not know what negotiations Gen. Goethals had.

Senator VARDAMAN. You say you had nothing to do with that?

Mr. FERRIS. No, sir.

Senator VARDAMAN. Well, after you found out that the contracts had been transferred, did you inform the Emergency Fleet Corporation about that?

Mr. FERRIS. The contract was not transferred.

Senator VARDAMAN. What was that?

Mr. FERRIS. The contract was not transferred; they contracted direct for the Government ship.

Senator VARDAMAN. It was not transferred? I thought the Clinchfield Navigation Co. transferred the contract that they had with the Sloan Corporation for those 16 ships.

Mr. FERRIS. No; the Fleet Corporation contracted direct with the Sloan Corporation for 16 ships.

Senator VARDAMAN. Well, did that take the place of their contract with the Clinchfield people?

Mr. FERRIS. No; the Clinchfield people released their contract.

Senator VARDAMAN. Did they share in that profit?

Mr. FERRIS. The Clinchfield people?

Senator VARDAMAN. Yes.

Mr. FERRIS. I imagine so, yes.

Senator VARDAMAN. They got a part of the profits of the contract that the Government made with Sloan?

Mr. FERRIS. Yes, sir.

Senator VARDAMAN. Did you know of that?

Mr. FERRIS. I did not know that until afterwards.

Senator CALDER. Mr. Ferris, as I understand it, the Fleet Corporation turned down the question of a transfer of these contracts to the Fleet Corporation from the Clinchfields; is that correct?

Mr. FERRIS. Yes, sir.

Senator CALDER. And then the Fleet Corporation made a contract with the Sloans——

Mr. FERRIS. Yes, sir.

Senator CALDER (continuing). For the building of four ships at $490,000 apiece?

Mr. FERRIS. Sixteen ships.

Senator CALDER. Sixteen ships at $490,000 apiece?

Mr. FERRIS. Yes, sir.

Senator CALDER. The matter of that price you had nothing whatever to do with?

Mr. FERRIS. I had nothing whatever to do with that.

Senator CALDER. You were not consulted, and you were not even informed about it?

Mr. FERRIS. No, sir; I knew nothing whatever about it.

Senator CALDER. And you had nothing to do with it, directly or indirectly?

Mr FERRIS. Nothing to do with it whatever. I had no knowledge of it.

Senator CALDER. And whatever division was made between the Clinchfield people and the Sloans of the profits, or the difference between the two prices, was something that you were not informed about?

Mr. FERRIS. I was not informed about it; no, sir.

Senator VARDAMAN. You were informed as to the contract between the Clinchfield Co. and the Sloan Co., were you not?

Mr. FERRIS. Well, it was in my architect's agreement. I did not realize it at the time, and did not remember about it.

Senator VARDAMAN. You did know that they had contracted for 4 ships with the option of 12 more at $385,000 a ship, did you not?

Mr. FERRIS. No; not on the option; on the four ships. I did not know what option was on the 12 ships.

Senator VARDAMAN. You did not?

Mr. FERRIS. No.

Senator CALDER. In this option between the Clinchfield Co. and the Sloans, was the price on the additional 12 ships fixed in the option?

Mr. FERRIS. Yes, sir; in the option—as appears in the record, and in the proposition sent to Gen. Goethals.

Senator CALDER. Let us get that straight: The Clinchfields and the Sloans had an arrangement by which the Sloans were to build four ships at $385,000 apiece?

Mr. FERRIS. Yes, sir.

Senator CALDER. And an option for 12 additional ships?

Mr. FERRIS. Yes, sir.

Senator CALDER. At $448,000 apiece?

Mr. FERRIS. $448,000; yes, sir.

Senator CALDER. So that those 12 ships were not to be built at $385,000, but only four ships were to be built at that price?

Mr. FERRIS. Only four ships.

Senator VARDAMAN. Were they the same size ship?

Mr. FERRIS. They were smaller ships; they were 3,200-ton ships.

Senator VARDAMAN. Were the 12 ships to be the same size as the four ships?

Mr. FERRIS. The same size as the four, yes, sir; duplicate ships.

Senator VARDAMAN. Could they build those ships as cheaply for the Government as they could for the Clinchfield Navigation Co.?

Mr. FERRIS. I do not think so, no, sir.

Senator VARDAMAN. Why could they not build them as cheaply for the Government as for the Clinchfield Co.?

Mr. FERRIS. The Government ships are more expensive ships, more exacting in the details of the specifications.

Senator VARDAMAN. I will ask you, as an architect, what was the real difference in cost? What would you say it was?

Mr. FERRIS. I should say at least $50,000 was due to the change in design.

Senator CALDER. Did you not say a few moments ago that that figure was $70,000?

Mr. FERRIS. $30,000 of that, Senator Calder, is due, as I figure it, to the change in market conditions; that is, without figuring the change in dead-weight tonnage. If you allow the increased dead-weight, which it would be fair to allow, that would account for a difference of nearly $100,000 in the price.

The CHAIRMAN. Well, I should think that it would be just as fair and just as reasonable to allow for the increase in dead-weight as for the other changes, because that increased the value of the ship.

Mr. FERRIS. Yes; it increased the value of the ship.

The CHAIRMAN. That would seem to be as fair as to allow for the increased price of lumber and other things.

Mr. FERRIS. Yes, sir; the price was all based on so many dollars per ton of dead-weight.

The CHAIRMAN. Yes.

There is another matter I want to ask you about, Mr. Ferris. I do not recall precisely the testimony that has been given here, but I think I can state the substance of it. The representative of Mr. Jahncke, I think he was the engineer, went to New York and endeavored to get the plans from the Submarine Boat Corporation for those ships that Mr. Jahncke's company was to build.

Mr. FERRIS. Yes, sir.

The CHAIRMAN. And he could not get the plans there; and he called at your office in New York and applied to your office there to

design those ships; and your partner, or representative there declined to make any contract about it until he could communicate with you; and it was also testified, as I recall, that you were telephoned to here in Washington, and your reply was in the negative, that you would not undertake it.

Of course, Mr. Jahncke was anxious to begin, and his people were doing everything they could to make progress. And it was decided that the man in your office with whom this engineer representing Mr. Jahncke was in consultation, and the engineer himself, should come to Washington and see you.

They came to Washington; this engineer, Mr. Jahncke's representative, did not see you; but the man from your office—I do not recall his name——

Mr. FERRIS. It was Mr. Dornin.

The CHAIRMAN (continuing). Mr. Dornin told him that he would see you; and I believe it was testified that he reported later on that he had seen you, and that you still declined to make the contract, or the plans; and the engineer representing Mr. Jahncke was rather persistent and wanted to have something done about it; and he asked your representative to see you again. And the next morning, as I recall the testimony, they had a conference, and Mr. Dornin told Mr. Jahncke's representative that he had seen you, and that you had agreed to prepare those designs for the amount of money stated—I think it was $20,000. I wanted to ask you if that was a correct statement of the matter.

Mr. FERRIS. No; that is not correct, Mr. Chairman. I told Mr. Dornin that I simply refused, and that the matter would have to rest until I could go to New York and find out what it was about. And when I went to New York and found out the whole situation, I stopped work on the whole thing.

The CHAIRMAN. Then Mr. Dornin's memorandum agreement with the engineer of Mr. Jahncke, which they signed up at the Willard Hotel in this city, as I recall——

Mr. FERRIS (interposing). At the Ebbitt Hotel.

The CHAIRMAN (continuing). At the Ebbitt Hotel, was not authorized by you?

Mr. FERRIS. No, sir; and I destroyed it when I got to New York and found it.

The CHAIRMAN. All right. Now, let me ask you a few questions about designing ships. Was it not possible for the Shipping Board, or the Emergency Fleet Corporation, to obtain designs and plans for merchant ships from some good, responsible shipbuilding yards in the country, without very much expense?

Mr. FERRIS. Well, they did, Mr. Chairman, in a number of instances, where they could produce repeat orders, that is, duplicate tonnage that was satisfactory. For instance, a 9,400 ton ship was taken from Moore & Scott, and the 8,800 ton ship was a standard ship—although I made that standard ship, but they had built them.

Your thought, Mr. Chairman, as I understand is, so as not to make it necessary to prepare new designs for the ships?

The CHAIRMAN. Yes.

Mr. FERRIS. Well, in the case of a number of steel ships, that was done; the new designs for the steel ships, or the troop ships, and the fabricated ships—of course, the fabricated ships had to be new, clean

cloth work. But as to the wooden ships, there was no standard for the wooden ships.

The CHAIRMAN. There was no standard for the wooden ships?

Mr. FERRIS. No, sir.

The CHAIRMAN. Then your purpose was to standardize the wooden ships, changing the tonnage, for instance?

Mr. FERRIS. Yes, sir.

The CHAIRMAN (continuing). To 3,500 tons, 5,000 tons, and so on?

Mr. FERRIS. Well, the Fleet Corporation made only one standard wooden ship, so far as that is concerned, and that was the 3,500-ton ship.

The CHAIRMAN. Well, after having made that design, Mr. Ferris what was the necessity for making so many changes in the desigr afterwards? The testimony before this committee indicates tha there were numerous changes made, and those changes caused delay among the shipbuilders. Was that necessary? Could you not hav completed that design at the outset, and had it all fixed and stand ardized before you let the contracts for them?

Mr. FERRIS. Well, the contracts were placed, Mr. Chairman, as soon as the detail specifications were perfected; and what we call the design plans—do I gather that these changes that you speak of were changes affecting the lumber people, or the building of the ships proper?

The CHAIRMAN. The lumber people particularly; they claim that they were delayed by the change in the design; some of the shipbuilding people also claim that they were delayed by changes.

Mr. FERRIS. Well, there were changes made in the lumber schedule, but I think the greater part of the changes, as I remember, were made at their solicitation, in order to help get the timber. On the Pacific coast, we made practically no change in the timber schedule for the fir wood ship.

The CHAIRMAN. I understand that there has been some recent change in the design with regard to the timber?

Mr. FERRIS. Yes; allowing them to build up around the bilge, for the flitches.

The CHAIRMAN. Yes.

Mr. FERRIS. I do not know about that. I have heard about it.

The CHAIRMAN. I will ask an expert opinion from you: What is your judgment about the effect of that change on the ship as to its strength and usefulness generally?

Mr. FERRIS. Well, I could not say about that, Mr. Chairman; I do not know enough in detail about it. I could not pass an opinion on it without seeing it and seeing how the pieces were fastened together.

Senator CALDER. Why did you decide on a larger timber than they were using?

Mr. FERRIS. Because I understood from the yellow pine people that they could get the timber. They went all over the original first schedule and said they could produce that timber.

Senator CALDER. And then it was found that they could not?

Mr. FERRIS. Well, the changes were made in the lumber schedule in order to help get the larger sizes of timber; lengths and sizes were reduced and things of that kind, to help them get the timber.

The CHAIRMAN. Then there were some changes made which were intended to strengthen the ship, I believe, which they claim caused some delay, and it increased the cost.

Mr. FERRIS. That is the change in the floors. I testified as to that when I was before the committee before. It was claimed to be in the interest of strength, although they have gone back to the original design now, I understand; at least I have been told that.

The CHAIRMAN. That change you did not regard as absolutely necessary, did you?

Mr. FERRIS. No, sir.

The CHAIRMAN. It was Admiral Bowles who suggested that, was it?

Mr. FERRIS. Yes, sir. I agreed to it; I will admit that; but I did not consider it necessary.

Senator CALDER. Is it your understanding that the change in the plan made at that time has now been determined to be a mistake and they have gone back to the original design?

Mr. FERRIS. I would understand so, yes, sir.

Senator VARDAMAN. How long were you in the employ of the Shipping Board?

Mr. FERRIS. I commenced work with them in April, 1917, and continued until the last of January of this year.

Senator VARDAMAN. Why did you leave the service?

Senator RANSDELL. If you will permit me, Senator Vardaman, that was brought out in the first part of Mr. Ferris's statement; but perhaps you wish to question him further about it?

Senator VARDAMAN. No; if he has brought that out, I do not care to pursue it further.

Senator RANSDELL. I would like to ask you about the fabricated ship. You designed the fabricated ship, did you not—the new design that is being worked on at Hog Island, and also by the Submarine Boat Corporation?

Mr. FERRIS. In this way: I made design and details in the case of the Submarine Boat Corporation. In the case of the Hog Island plan, the 7,500-ton and the 8,000-ton ship, I made only the design of the ship, and they are making the details.

Senator RANSDELL. They are making the details?

Mr. FERRIS. Yes, sir.

The CHAIRMAN. Mr. Ferris, really, when you think it all over now, are you not rather inclined to agree that the contract, as you understood it and as you interpreted it at the time, made, as you have indicated since, through Gen. Goethals, puts you in a rather impossible position, in that it allowed you to continue a private practice in New York, and allowed your offices to take business there, while you were the architect for the Shipping Board and the Fleet Corporation, and there was likely to arise a condition that would create just about what happened. Do you not think so?

Mr. FERRIS. Well, I hardly thought that, Mr. Chairman. That was pretty well understood, I thought, in my letter to Gen. Goethals, which I understood he accepted. You see, I continued the designing work in New York up until September.

The CHAIRMAN. Well, the effect of all that was, however, that you almost forced business into your office in New York: if you were to

be allowed to keep that office going, any man who wanted to build a ship would naturally go to your office to get his designs.

Mr. FERRIS. But the way it worked out, I never took an additional job of any kind after I started the Government work. All I had done was to endeavor to finish the contract and obligations——

The CHAIRMAN (interposing). That you had?

Mr. FERRIS. Yes, sir.

Senator RANSDELL. You did not take any new contracts?

Mr. FERRIS. No, sir, because I did not feel that I could.

The CHAIRMAN. Do you mean that you did not feel that you could physically—that you had too much to do?

Mr. FERRIS. No; I felt that I ought to give every bit of my energy and time to the Government—which I did.

Senator RANSDELL. You did give every bit of your energy and time to the Government?

Mr. FERRIS. Absolutely, Senator.

Senator CALDER. And then, as the Chairman has suggested, you felt you would be involved in difficulty if you did?

Mr. FERRIS. Yes, sir.

Senator CALDER. It was an impossible position for you, really, was it not?

Mr. FERRIS. Yes, sir.

The CHAIRMAN. You kept your office open in New York, did you?

Mr. FERRIS. I had to do that, in order to continue the work of the Submarine Boat Corporation.

The CHAIRMAN. What forces did you have there?

Mr. FERRIS. I had as high as 24 or 25 men.

The CHAIRMAN. And those men were kept going right along?

Mr. FERRIS. They were kept going right along on the Government work. I only had one piece of work that I gave any time to that amounted to anything; that was a contract that I had in connection with the New York Barge Canal; that was not a material matter.

The CHAIRMAN. Do you mean that your office force in New York did not do any work on private contracts?

Mr. FERRIS. Only in this one instance, Mr. Chairman. In fact, I did not take any contracts for private owners.

The CHAIRMAN. I understood that, so far as you yourself are concerned, but I did not know whether you intended that to apply to your entire force.

Mr. FERRIS. Yes, sir; the entire force.

Senator VARDAMAN. This may have been brought out, but I did not understand it: What were you paid by the Government? What did your services cost the Government per month?

Mr. FERRIS. $2,500, and expenses.

Senator VARDAMAN. What did those expenses amount to? Do you remember what you were paid altogether?

Mr. FERRIS. On an average, I suppose it would run to $3,200 a month, or something of that kind.

Senator VARDAMAN. $3,200 a month; that included both the fee——

Mr. FERRIS (interposing). And expenses. Well, of course, they paid for my office force on the Government work.

Senator VARDAMAN. Well, I would like to know, if you can recall it, what you received a month for the services you rendered through your office and for your individual services?

Senator CALDER. I think, Mr. Ferris, that Senator Vardaman means the amount you received in your office in Washington and also in your office in New York; your pay roll and expenses.

Senator VARDAMAN. Yes; what it cost the Government for the services you rendereed, whether rendered by you in Washington or by your office in New York.

Mr. FERRIS. I think the total for all services up to September 1 amounted to something like $40,000.

The CHAIRMAN. Are there any other questions?

I have received two letters relating to Mr. Ferris. One is from Mr. J. W. Powell, vice president of the Bethlehem Shipbuilding Corporation, and one from Mr. H. L. Ferguson, president and general manager of the Newport News Shipbuilding & Dry Dock Co. I do not know whether Mr. Ferguson expects to appear before the committee or not on the subject.

I would like to have these letters go in the record and I can read them to the committee now.

Senator VARDAMAN. Are they letters of commendation, Mr. Chairman.

The CHAIRMAN. Yes.

Senator VARDAMAN. Then, I suggest that they be inserted in the record without being read.

The CHAIRMAN. Well, I thought [illegible] committee would know what those positions [illegible] There have been some suggestions [illegible] appear before the committee.

Mr. FERRIS. He can [illegible] not want to burden the [illegible]

The CHAIRMAN. Well [illegible] except this letter [illegible]

Senator RANSDELL. [illegible] letters in the [illegible] Mr. Ferguson [illegible]

Senator VARDAMAN. [illegible] you think [illegible]

Senator [illegible] that I [illegible]

The CHAIRMAN. [illegible] Ferguson will [illegible]

The [illegible]

[illegible]

[illegible]

DEAR SIR: [illegible] letter [illegible] I [illegible] Ferris [illegible] position [illegible] previous [illegible]

Very truly yours,

J. W. POWELL, Vice President.

NEWPORT NEWS SHIPBUILDING & DRY DOCK CO.,
Newport News, Va., March 19, 1921

Senator DUNCAN U. FLETCHER,
United States Senate Chamber, Washington, D. C.

MY DEAR SENATOR: I understand the Senate Committee on Commerce will hav hearing Thursday morning and regret that an important engagement prevents from being present to testify as to the character of Mr. Theodore E. Ferris.

I have known Mr. Ferris about 12 years and in that time our company has buil his design and under his supervision about 12 large vessels. He has always b exceedingly upright in all of his dealings with us and I personally consider him honest man as well as a competent designer and engineer.

Yours, very truly,

H. L. FERGUSS

The CHAIRMAN. I believe that is all, Mr. Ferris.

(Thereupon, at 4.15 o'clock p. m., the committee adjourned, meet at the call of the chairman.)

UNITED STATES SENATE

[illegible]

The [illegible]
committee [illegible]
Present: [illegible]
Shields, [illegible]
The [illegible]
Goodenough, general [illegible]
building [illegible]
at the time [illegible]
would [illegible]
record at this [illegible]
The letter [illegible]

[illegible]

Senator [illegible]
[illegible]

My [illegible]
me by Senator Harding [illegible]
I note in my [illegible]
of sending a [illegible]
(Our invitations [illegible]
specifications the [illegible]
tonnage and the [illegible]
then made a [illegible]
would be [illegible]
these different [illegible]
detailed drawings of [illegible]
of the amount which [illegible]
we received from them [illegible]
work and how many [illegible]
period of time. [illegible]
order to determine [illegible]
servatively within the given [illegible]
This was necessary because [illegible]
that when the fabricated steel was [illegible]
ered, because we would have [illegible]
bidder. Having thus determined the reliability of the bidder and the [illegible]
amount of the respective classes of work which each of them could handle [illegible]
time, we distributed the work, beginning with the lowest responsible bidder and
awarding to him the entire amount of his capacity as we had [illegible] this
capacity would in every case be less than what we required, we would then [illegible]
next lowest responsible bidder and award him such amount as he could [illegible]
deliver in a given time. If there was still a remainder required [illegible]
take the third lowest responsible bidder and give him such an amount [illegible]
conservatively handle in the given time, and if there still remained [illegible]
by us, we would proceed with the next lowest responsible bidder and [illegible] until

we had exhausted by our awards the entire amount which we required for e rate, respective classification of work in the specified time.

It is true that some of this work was awarded to the Minneapolis Steel & M Co., a concern with which our Mr. Gillette had previously been connecte which he still has an interest, but the awards given to this concern were gi the exact basis and in competition with all the other concerns bidding, an not been able to avail ourselves of the capacity offered by this concern, t would have been that we should have been compelled to give the amount them to a concern making a higher bid in order to get it done.

The same situation applies with respect to the Midvale Steel Co., whose c nection with us is that Mr. Corey, its president, is a director of the Americ national Corporation. This concern likewise was obliged to enter into con with all other concerns for the respective classes of work and was in no case any of the work except as it was entitled to it by reason of the amount of it its capacity, and had we not been able to avail ourselves of the capacity of vale Steel Co , the result again would have been that we should have been c to have awarded that work to a higher bidder in order to get it done.

In the case of the Kansas City Structural Steel Co., of which organization Smith, our superintendent of production, is a member, this concern likewis into competitive bidding with the other concerns on each part of the work th handle, and they were not given an award except where they were entitled reason of the amount of their bid and their capacity, and the awards to this in every case simply saved the Government from having to pay more to so concern to do the work.

The details of the awards of contracts to the concerns under discussion are a

Fifty "A" ship rudders.—William Bros. Boiler & Manufacturing Co., Min Minn., bid on 25 only; were awarded 25. Quoted $907 each, or $125 per ton.

Kansas City Structural Steel Co., Kansas City, Mo., bid on 50; were aw Quoted $940 each, or $130 per ton.

Hamilton Bridge Co., Hamilton, Ontario, bid on 50, at $1,160 each, or $16

Dominion Bridge Co., Montreal, Canada, bid on 50, at $1,300 each, or $18

McClintic-Marshall Co., Philadelphia, Pa., bid on 50, at $1,450 each, or $20

If we had awarded all 50 rudders to one shop, they should have gone to th City Structural Steel Co., but we took advantage of William Bros. Boiler facturing Co.'s bid on 25, and in that way split the order.

Fifty "A" ship stems.—This was originally designed in one piece. We inquiries to heavy forge makers and could not get a bid of any kind on it for t that shipbuilders as a rule forge their own stems and they were so busy the want anything to do with it. Finally McClintic-Marshall advised they w us a bid on the fabrication of this stem. if we would cut it in two and have with a splice at a point a short distance above the point of curvature. They a bid, but when we were ready to order the material we found that Midvale only mill which could roll it for us. This stem was a rectangular section 2 inches, about 50 feet long. While we were negotiating with them for the they studied the matter carefully and found they could bend this in one pie while they were rolling it and made us a price which was the same as that p quoted by the McClintic-Marshall Co. We considered it a great advanta able to get the piece made without a splice and by the mill which rolled t

We have also placed another contract for fabrication with the Cambria St subsidiary of the Midvale Corporation, covering punching and countersi plates. On the first 25 "A" ships they have:

Five hundred tons Class I-A, flat rectangular plates, multiple punche per ton.

Sevenhundred and fifty tons Class I-B, flat rectangular plates, multiple and countersunk, $21 per ton.

We received 18 bids on Class I-A, ranging as follows:

Four at $16, 1 at $16.20, 5 at $20, 1 at $21, 4 at $26, 1 at $27, 1 at $28, 1 a

For comparison of bids on Class I-B see below.

The following classes of work were awarded to the Minneapolis Steel & M Co.:

I-B, multiple punched and countersunk plates, $20 per ton.

V-A, midship section, solid floors, $45 per ton.

V-B, forward section, solid floors, with flared angles, $55 per ton.

X, miscellaneous riveted work, which is frames, deck beams with riveted tions, bulkhead posts, struts, etc., all rivets to be furnished by the fabric per ton.

XII, punched deck beams, $12.50 per ton.

Bids from 20 fabricating shops were received on Class I-B, on which the Minneapolis Steel & Machinery Co. quoted $20 per ton. These bids ranged as follows:

One at $16, 1 at $18, 6 at $20, 2 at $21, 1 at $22, 1 at $24, 2 at $26, 4 at $28, 1 at $30, 1 at $33.

In this class you will note that the Minneapolis Steel & Machinery Co. was third from the lowest bidder. On 25 ships we had 18,625 tons of this material to let, so that every one whose bid was under $26 per ton received some of this work. We had to use that many shops to place the necessary tonnage and get out the output in the required time.

Bids from 34 fabricating shops were received on class V-A, on which the Minneapolis Steel & Machinery Co. quoted $45 per ton. These bids ranged as follows:

One at $32, 1 at $33, 3 at $35, 1 at $36, 1 at $38, 1 at $39, 1 at $40, 6 at $45, 1 at $47, 2 at $48, 1 at $50, 1 at $52, 1 at $53, 1 at $54, 1 at $55, 1 at $60, 1 at $63, 1 at $64, 1 at $63, 3 at $70, 1 at $71, 1 at $72, 1 at $73, 1 at $75.

Awards in this class were made at prices as high as $60 per ton in order to get the material placed.

Bids on class V-B, on which the Minneapolis Steel & Machinery Co. quoted $88 per ton, were received from 20 fabricators, ranging as follows:

One at $33, later raised to $36, 1 at $38.60, 1 at $39, 1 at $41, 1 at $50, 5 at $55, 2 at $56, 1 at $57.60, 2 at $60, 1 at $65, 1 at $73.20, 1 at $81, 1 at $88.

We paid as high as $55 per ton in western shops, to place all of this work on the first 25 "A" ships, and would have had to pay over $70 in the Philadelphia or Pittsburgh districts, for all bids over $70 were from shops in these districts. There was not enough capacity offered at the low prices to take all the tonnage required and to get the deliveries as quickly as required.

On Class X, on which the Minneapolis Steel & Machinery Co. quoted $24 per ton, we received 40 bids, ranging as follows:

Two at $15, 1 at $18.50, 1 at $20.60, 5 at $24, 1 at $31.

The other 30 bids ranged from $26 to $80 per ton. We were able to place all the work at $24 or under.

There were 31 bids received on Class XII, on which the Minneapolis Steel & Machinery Co. quoted $12.50 per ton. These ranged as follows:

One at $6, 1 at $7, 1 at $10, 1 at $10.80, 1 at $11.95, 1 at $12.00, 2 at $12.50, 1 at $15, 1 at $15.50, 2 at $16, 2 at $17.50, 8 at $18, 1 at $20, 1 at $23, 1 at $24, 1 at $24.80, 1 at $25, 1 at $28, 1 at $37.40, 1 at $65.

We had to pay as high as $18 per ton for work in this class in order to get the tonnage we needed.

Another thing which had to be taken into consideration was the ability of the shops, so that while we were able to accept the lowest bids in nearly every case, there were a few which we could not accept, and a great number in which we could not place as much work with them as they thought they could handle. Also, in no case did the shop which had made the low bid on any class of work have great enough capacity to take care of all the work we had to let in this class. It was, therefore, necessary to distribute this work among enough low bidders in amounts sufficiently conservative to assure us that they could fulfill our requirements, and to enough shops so as to distribute all of it.

The bids above are those given us by the fabricators f. o. b. their plants for the fabrication of the material. In comparing these bids, however, for the purposes of making awards, we, in all cases, allowed for all the freight that would enter into the situation from the mill to the fabricator and from the fabricator to Hog Island, so that the awards were finally based upon the cost delivered at Hog Island.

I might say in closing that it has been very fortunate that contracts were placed with these western shops for the reason that of all the mills furnishing steel to our contracts, the Illinois Steel Co. and the Inland Steel Co., situated in Chicago, have kept our fabricators supplied with less delay and in larger quantity than other mills, and as a consequence of that we are receiving at Hog Island in advance of most other places steel from the western fabricators.

I would respectfully ask that the record be corrected accordingly.

Thanking you for your courtesy, I am,

Yours, very truly,

WILLIAM GOODENOUGH,
General Manager.

The CHAIRMAN (continuing). I have also a letter, dated March 23, 1918, from Mr. George O. Muffleld, vice president American International Shipbuilding Corporation, calling attention to certain additions which he desires to make to his testimony as given before the

committee. That letter will also be inserted in the record at this point.

(The letter refered to is here printed in full, as follows:)

AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION,
Philadelphia, Pa., March 23, 1918

Hon. DUNCAN U. FLETCHER,
Chairman Senate Commerce Committee
Senate Office Building, Washington, D. C.

DEAR SIR: I return herewith first proof of testimony given by me before the Senate Commerce Committee on Wednesday last. I have made pencil corrections in the testimony, but I desire also that there be added to my answers in the testimony the following:

On page 57 LL, Mono. Section. At the point marked with * * *, before the words, "The Chairman. The yard now is a different yard from the one you started with when you made that guess as to the estimate?" insert the following, to wit:

"There has been a lot of talk about extravagance, mistakes, wasting, etc. There have been no mistakes and no extravagancies. I want to repeat that this yard could not be built for less money in the same time and under the same conditions. If it were to start to-day we would do it in exactly the same way, and on account of the increase in wages it would cost more. That the so-called estimate of $21,000,000 will be exceeded is no indication that money has been wasted. As a matter of fact no real estimate was ever made, nor could it have been made under the circumstances and in the limited time. It was simply a guess which everybody knew. As a matter of fact, with an estimate made, if the work in fact thereafter costs less than the estimate, that is no indication that the work has been well done, or if under a given state of circumstances the work in question costs more than an estimate, that is no indication that it has been extravagantly done. What the Government is interested in is whether it has obtained its money's worth, and that is true here because it could not duplicate this yard for what it has cost. I defy any fair-minded contractor to study this job carefully for several weeks and say that it could be done in the same time for less money than it has cost. We had to have the ships. Without the yard, no ships could be built. It was speed, first, last, and always, and we worked just the same as if an invading army were within 100 miles of us instead of across the ocean. What is the difference? Are we not in the war just as much as if we were in France, and would anyone consider the cost if we were building embankments and trenches to hold out an advancing army? Are not the ships the first step in line to the front? And, as I said before, a ship is lost every eight hours."

I also desire that there be added to my answer on page 58 LL, Mono. Section, before the words: "Senator Ransdell. For similar work?" the following, to wit:

"We could have done the work ourselves, but in spite of the large army of constructors which we had this job was larger than any we have ever undertaken, and we necessarily had to materially increase our forces. Had we done this work ourselves, we should have had to buy at enormous expense or should have been compelled to have leased equipment the same as we have done from the various contractors. We could have drawn up carefully prepared plans and specifications and asked for competitive bids, but no reputable or responsible contractor would have for a moment taken a lump-sum contract on this work unless he included a large margin for profit and contingencies, probably 25 per cent or 30 per cent. As it is, the contractor has received, as above stated, a fixed gross profit based on 5 per cent of the estimated cost. If instead of 5 per cent which the Government is now paying, the contractor had included a 25 per cent or 30 per cent profit in a lump-sum bid, no one probably would have thought anything about it. As a matter of fact, we had no time to carefully prepare plans and specifications, and I doubt whether we could have gotten any contractor to bid on them if they had been prepared. Prices of materials and of labor have been advancing too rapidly for any reputable contractor to take the great risk involved in doing this work on a lump-sum basis.

"Now, as above stated, what we have done has been to let this work to experienced contractors in this form of contract which I have here before me. This form of contract is one that we have been using for 15 or 20 years in connection with all our commercial work, and subcontracts which we have made in connection with this yard are not different from those that have been made for years past by ourselves in large contracts all over the United States, the only difference being that we are paying the contractors a gross profit of 5 per cent on the estimated expenditures rather than the 7½ per cent or 10 per cent which we have been accustomed to paying. Furthermore, in all of our commercial work, we have always received a fee for our services for the entire work, and this fee has been on top of what fee has always been paid to the

various subcontractors. On this job, as it has been explained to you several times, we receive no fee whatever for building the yard. We simply receive a fixed fee of so much per boat after the yard is built. Neither American International Corporation, American International Shipbuilding Corporation, New York Shipbuilding Corporation, nor Stone & Webster receive any compensation whatever for building this yard. Should this contract be terminated now we will not have received one cent for our services, nor could we collect anything. The contract is, therefore, an absolutely divisible one, because it can be terminated by the Government at any time. The only fee we get is a fixed fee, which we receive as each boat is completed, and this fee is very materially less than that being paid to contractors by the Navy Department for boats built under its supervision. Our object in making these subcontracts was to secure the use of contractor's equipment and to obtain the use of his well-organized working forces, whom he had trained and who were working together continually on this sort of work. For instance, where we were to let a subcontract for the building of the ground structure for 10 shipways, we arrived at an agreement with the contractor for a rough estimate of the cost for the particular part of the work we wanted to have done with his forces and his equipment. If it were estimated to do this particular part of the work at, say, $500,000, we applied 5 per cent, which made his gross profit fixed at $25,000. If the work cost less than $500,000, the contractor would receive the same fee of $25,000. If the work in fact cost $1,000,000, he receives only the $25,000.

"Now, let me read from this contract the services for which we pay the contractor. It says here with respect to this work. 'We propose to act as your agents, being guided in all respects by such instructions as you may from time to time give. We furnish at our own expense the services of our executive officers, our business organization and the services of our principal office accounting, auditing, and purchasing and other forces in so far as required. We furnish at our own expense all other expenses of our principal officers except only the salaries of men in the engineering and drafting departments for the time they are engaged on the work.' You will see from that extract from the contract in question, and all of these subcontracts are of the same character, just what the contractor himself furnishes at his own expense, for which the Government pays nothing. Now, there is no sub-know-how here. We furnish all of the know-how. There is no commission paid upon commission here. The only fee or compensation of any kind or character which the United States Government pays for the building of the yard is the fee that the subcontractors will receive on account of these subcontracts, and it has been estimated that the work covered by those contracts will amount in the aggregate to about $8,000,000. The total compensation that will be paid by the Goverment for the building of the entire yards, whether they cost $21,000,000 or $40,000,000, is about $400,000, and this sum is paid to the subcontractors. Neither American International Corporation, American International Shipbuilding Corporation, New York Shipbuilding Corporation, nor Stone & Webster receive one cent of compensation for the work which these subcontractors are doing, or which anyone else is doing."

The foregoing corrections are very important, because these subcontracts and the nature of them should be thoroughly understood by the Senators, and I trust that you will see that the corrections herein requested are made in the record. I would also be very glad if, upon the convening of the committee again on Wednesday, you would read this letter to the committee, so that they will have in mind clearly the corrections and additions I have made in my testimony.

Yours, very truly,

G. O. MUHLFELD,
Vice President American International Shipbuilding Corporation.

The CHAIRMAN (continuing). I have also two letters from Mr. William R. Hinsdale, consulting engineer and metallurgist, Orange, N. J., submitting some documents and papers giving detailed information concerning some property, both coal and ore lands, and also timber lands, etc. I do not think it is necessary to print the full data given by him in the record; it will be filed in the committee room, and the members of the committee can have access to it. We can not go into that question, it seems to me, of investigating the various properties that might possibly be acquired by the Government, but the two letters from Mr. Hinsdale are short, and I presume they may as well go in the record.

(The letters referred to are here printed in full, as follows:)

ORANGE, N. J., *March 18, 1918.*

Hon. DUNCAN U. FLETCHER,
United States Senate.

MY DEAR SENATOR: In response to your letter of February 21, I am sending you herewith a map and some very brief statements concerning the matter I referred to in my letter of February 19, 1918.

A large amount of detailed information concerning the vast property is on file in the Navy Department. Government and other maps and more than 30 large photographic views of the great timber tracts and streams suitable for production of power are on file.

A tract of about 15,000 acres containing the finest by-product coal for coking known to commerce is now available for Government use located conveniently to this great property.

I am sending you copies of letters and brief statements concerning this territory rather than to send you formal technical reports, the latter will be available if you are interested in what I am sending.

I hope you will recognize the force of the facts stated in my letter of February 19, copy of which I inclose. When you have examined the miscellaneous papers I am sending you, kindly acknowledge personally.

Faithfully, yours,

W. R. HINSDALE.

P. S.—You will please observe that each square on the inclosed maps represents 1 mile.

FEBRUARY 19, 1918.

Senator FLETCHER,
Chairman of the Senate Committee on Commerce,
Washington, D. C.

MY DEAR SENATOR: You are quoted with stating that—

If the first shipping bill had passed and we had gotten down to business, the Government could have built a merchant marine for $100 a ton. It is now costing $200 or more.

I wish to support your statement by saying that if good advice had been accepted at the first our merchant marine could have been built for very much less than $100 per ton.

Had the good advice been taken, we could not only have built at the minimum price, but we could have furnished Japan with all the shipbuilding steel she requires and have saved some heartburning on the part of the Japanese people and Government.

If you will take the trouble to personally read this letter and acknowledge it to the writer, he will be willing to give you further details.

Yours, very sincerely,

W. R. HINSDALE.

The CHAIRMAN (continuing). I have also quite a number of letters from people in Minneapolis, Minn., for instance, the managing editor of the Minneapolis Tribune, and from some banks and business people in Minneapolis, referring to the standing there of the Harris brothers and Mr. Gillette; these letters are sent in answer to some letters that were put in the record by Senator Nelson. Is it the desire of the committee to have these letters go in the record?

Senator BANKHEAD. You have read them, Mr. Chairman; is it necessary to cumber the record with them?

The CHAIRMAN. They are not long letters; they are, as a rule, short.

Senator JOHNSON. Are they sent in in rebuttal of the statements contained in the letters that Senator Nelson put in the record?

The CHAIRMAN. That is the purpose of them.

Senator JOHNSON. Then, in justice to the parties concerned, I think they should be inserted in the record.

The CHAIRMAN. All right; the letters will be inserted in the record at this point.

(The letters referred to are here printed in full, as follows:)

THE MINNEAPOLIS TRIBUNE,
March 19, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman of Commerce Committee United States Senate,
Washington, D. C.

DEAR SENATOR: At a recent hearing by your committee investigation of affairs at Hog Island, there was permitted in the report of the hearings a statement by an irresponsible citizen of Minneapolis seriously reflecting upon the character and ability of Leo B. Harris and Bernard Harris, two Minneapolis men connected with the Stone-Webster interests.

As a simple matter of justice to the Harris boys, I am urging you to let the record show that this charge against them was unwarranted. Both of the Harris brothers are men of unquestioned business ability and men of high personal integrity. They have been identified for a good many years with various industries and interests here, especially qualifying them as experts in the matter of building materials and also in the matter of transportation and the handling of men. Their earning capacity I know personally has been for some years much larger than they are in a position to make in their employment under Government direction. This is placing it on a strict business basis, and in addition to that, both of the young men are patriotically anxious to give the Government the best of their services in any capacity where their work is most needed.

This is not only my personal expression but represents, I want to assure you, the sentiment of a very large percentage of the business men of Minneapolis who know the Harris boys and their worth.

Yours, very truly,

W. H. HUNTER, *Managing Editor.*

F. H. CARPENTER LUMBER CO.,
Minneapolis, Minn., March 19, 1918.

Hon. D. U. FLETCHER,
Chairman Committee on Commerce, United States Senate, Washington, D. C.

DEAR SIR: My attention has just be called to a letter signed by a party named Abbott, in Minneapolis, which was communicated to one of the Senators during the past few days, and which has in turn been inserted in the Senate Congressional Record. This letter referred to the connection of Leo B. Harris with the Hog Island shipbuilding project, and is so far from the truth and from the facts as to warrant my calling your attention to it.

Mr. Abbott states in this communication that Leo B. Harris was a "junk dealer" in Minneapolis, and had never earned over $100 per month. I have known Mr. Harris for a great many years. He made a distinct financial sacrifice when he disposed of his business here and responded to the urgent call to assist in the construction of the shipbuilding yards in Philadelphia.

He has had a wide experience in assembling heavy building material, he is a man of first-rate ability along this line, he has been devoting 12 to 16 hours out of every 24 to his work for the past six months, and in the interest of fair play these facts should be known.

The party whose letter was inserted in the Congressional Record has no standing in the city of Minneapolis. Mr. Harris is well known as a young business man of rather exceptional ability. The attack upon him is wholly unwarranted, and should not be allowed to go into the Congressional records without protest. The animus back of the Abbott letter can perhaps be traced back to a time when Mr. Harris was a member of the park board of this city and he refused to recommend Mr. Abbott as park board engineer on account of his incompetency.

I would appreciate it if these facts could be brought to the attention of your committee, and if possible placed in the Congressional Record. If further information along the lines of this letter is desired, it would be a simple matter to provide it.

Yours, very truly,

F. H. CARPENTER.

MINNEAPOLIS, MINN., *March 19, 1918.*

Hon. D. U. FLETCHER,
Chairman Committee on Commerce,
United States Senate, Washington, D. C.

DEAR SIR: Mr. B. W. Harris, now superintendent of stores and equipment of the American International Shipbuilding Corporation, at Hog Island, Pa., has transacted banking business with us for about three years, as secretary and treasurer of the Chicago House Wrecking Co., of Minneapolis and St. Paul.

This company does a large volume of business, and Mr. Harris is the managing and directing force. He has made considerable profit for himself as well as for his company.

Mr. Harris is enterprising and possesses good business judgment and ability. Our dealings with him have been satisfactory in every way and we regard him highly.

Very truly, yours,

WM. F. OLSEN, *Cashier*

UPTON MILL & ELEVATOR CO.,
Minneapolis, Minn., March 21, 1918.

Mr. D. U. FLETCHER,
Chairman United States Commerce Committee,
Washington, D. C.

DEAR SIR: Doubtless, you will be surprised to hear from me, but I would like to have you know the feeling in general about the high salaries paid the Harris Bros., and Mr. Gillette.

First, in regard to the Harris Bros., I don't believe, and my belief is backed by hundreds of people in Minneapolis, in fact, all over the western country, that you could not have selected three more fit men for the position they hold. I honestly believe that if you had left it to the people here to send you three men on their merits you would have been blessed with the same three. In the second place, they have been brought up in this work. When the electric plant burned here, and something had to be done quick, Stone & Webster put Mr. Bernie Harris to look after all of their work. He was afterwards sent to Keokuk, Iowa, and put in charge of a big dam and water power they were constructing there. Mr. Leo Harris was elected about three years ago as one of our park commissioners with one of the largest number of votes ever cast for a commissioner. He was immediately placed at the head of the purchasing department, and his carefulness has saved the city many thousands of dollars.

Now, Mr. Gillette, who has been connected with the steel and machinery business to my personal knowledge for 20 years, and the people who are associated with him claim him to be one of the shrewdest men in that line.

Now, the people of Minneapolis, and this district, are well satisfied, and trust to their ability, knowing that you have three men who are honest, trustworthy, and beyond repraoch, and are willing to stand behind them on whatever you may call upon them to do.

I hope you will look into the truthfulness of this letter, inasmuch as what has been said about them, it is due them, and your organization as well.

Hoping this letter will reach you in good time, I beg to remain,

Respectfully, yours,

R. J. UPTON

FEDERAL RESERVE BANK OF MINNEAPOLIS,
March 21, 1918

Hon. DUNCAN U. FLETCHER,
Chairman Commerce Committee, United States Senate,
Washington, D. C.

[illegible] been interested in the testimony submitted to you [illegible] Island investigation and particularly i

If your inquiry is directed toward ascertaining what ability Mr. Gillette has been able to contribute to the cause of the young man, I am satisfied that your committee will find that his record upon government work is deserving of commendation rather than criticism.

I am not communicating with you with Mr. Gillette's knowledge [illegible], however, that some injustice has been done the young man, whom I respect, and who is in my opinion, with experience and age and very well qualified to do specialties work that now involves upon him.

Very truly yours,

[illegible] E. Ryan, [illegible].

MINNEAPOLIS, MINN.

Hon. D. U. Fletcher,
Chairman of the Committee on Commerce,
United States Senate, Washington, D. C.

Dear Sir: From newspaper reports I note that the ability of Mr. George [illegible] Gillette, of Minneapolis, now employed by the American Emergency Ship Building Corporation at Hog Island, has been attacked and the same adverse criticism has been directed at his connection with the ship yards.

I know nothing whatever about what I have seen in the papers regarding Mr. Gillette's connection in connection with the shipbuilding situation, but [illegible] know a great deal as to his ability.

Mr. Gillette has been connected with a company in which I have the honor to be president since having entered [illegible] 1903. He had taken special engineering [illegible] in college in [illegible] the manufacturing business. He has been under my special charge during all of these years, first serving in the shop where he gained a thorough knowledge of the fabricating processes, after which he spent several years in the [illegible] department, gaining a thorough knowledge of estimating and selling values upon the work. Advancing through this department to the sales department where he served several years as assistant sales manager and later as general sales manager and secretary of the company.

At times we have purchased large quantities of fabricated steel, besides what we have fabricated in our own plant, and Mr. Gillette had been interested with those purchases and also with the sales to the extent of many millions of dollars to the entire satisfaction of the company, and I consider him one of the most capable men in this line of industry in the country.

Some time last summer Mr. Goodenough requested that Mr. Gillette be released that he might engage him on the Hog Island work. I at first declined to do so but, later in the season, after repeated requests, I released Mr. Gillette and he went to Philadelphia, where I understand he has had charge of procuring structural steel entering into the ship construction.

I am sure that a careful investigation of his office will disclose the fact that he has served in this capacity in a most capable manner.

I am giving these facts because I believe, in justice to Mr. Gillette, they should be placed in your hands.

It is unfortunate that men of Mr. Gillette's character should have to be subjected to attack by men who pose as engineers and who have never been able to hold a position of importance and at this time, notwithstanding the tremendous demand for engineers in every capacity, are walking the street unemployed.

Yours, very truly,

J. I. [illegible]

St. Paul, Minn., March 20, 1918.

Hon. D. U. Fletcher,
Chairman Committee on Commerce,
United States Senate, Washington, D. C.

Dear Sir: The local papers have carried several references to a criticism directed to the Harris boys of Minneapolis and their supposedly exhorbitant salaries in connection with the shipbuilding work at Hog Island.

While I am not informed as to the plan of that work or the scale of salaries paid to other managers, it certainly seems unfair to the Harris boys for anyone to say that they have not in the past been able to earn as large salaries as at present.

We have had business relations for a dozen years with a large concern in Chicago, with whom Mr. B. W. Harris has been connected for the past few years, and I have an opportunity to watch his work very closely for the past year and a half or two

Mr. Harris has unusual ability and has been very successful—in fact, I should consider him a $15,000 or $20,000 a year man instead of a $5,000 man, and happen to know that his earning capacity has been more than that. I understand that he was selected because of his special ability and experience along certain lines and consider the Government most fortunate in securing a man of his qualifications to handle big jobs in a hurry.

I have met the other brother, Mr. Leo Harris, only a few times and do not know as much of his work except that he has been a money maker and has been generally considered a man of marked ability.

I should be very glad to be of service to you in giving you other references, especially among the St. Paul bankers, whom I am sure will confirm this report on Mr. B. W. Harris.

Very sincerely, yours,

WEBB PUBLISHING COMPANY,
HORACE C. KLEIN.

MERCHANTS NATIONAL BANK,
ST. PAUL, *March 20, 1918.*

Senator D. U. FLETCHER,
Chairman Committee on Commerce,
United States Senate, Washington, D. C.

DEAR SIR: We have learned that unfavorable criticism has been made regarding Mr. B. W. Harris, superintendent of stores and equipment of the American International Shipbuilding Corporation.

We wish to state that we have done business with Mr. Harris for about three or four years while he was a partner of the Chicago House Wrecking Co., of this city, which purchased the assets of the Charles A. Stickney Co., the sale amounting to $125,000.

Since we have known him Mr. Harris has never earned less than $7,500 to $10,000 a year. He has excellent ability and we believe that his personal character is of the best.

This letter is written with the thought that if there is a wrong impression created regarding the gentleman mentioned, we are glad to be of assistance in correcting it.

Yours, very truly,

R. C. LILLY, *President.*

MINNEAPOLIS, MINN., *March 20, 1918.*

Hon. D. U. FLETCHER,
Chairman Committee on Commerce, United States Senate,
Washington, D. C.

DEAR SIR: I have recently noticed in the public prints that statements have been made before your committee questioning the business standing and ability of Mr. B. W. Harris, of this city, now engaged in the Hog Island Shipyard. The statements of this character that came to my notice were so absurd that their refutation by persons who know Mr. Harris as a business man would seem hardly necessary. I have known him for several years, and this law firm has acted, and now acts, as legal counsel for companies in which he is interested, and one of which he was managing at the time he became engaged in the shipyard. He is an acute business man of excellent capacity and executive ability. I have found him in every way reliable. His business has been buying, selling, and dealing in iron and steel machinery, appliances and equipment of factories, manufacturing plants, and railroads, and taking over factories and plants and small railroad lines, branch lines, or parts of the same, in their entirety or their machinery and equipment. Not long since, this law firm assisted in negotiating and taking over, for Mr. Harris and others associated with him in the enterprise, the controlling interest in Charles A. Stickney Co., a company having a large factory for the manufacture of gasoline engines, the factory buildings and grounds being extensive and embracing several acres, in a central position in the city of St. Paul. A year ago I was commissioned by him and his associates to represent them in bidding at a mortgage foreclosure sale of a railroad of some 60 miles in length and its equipment, the purpose of their proposed purchase having been to dismantle the road and dispose of its equipment and appliances, especially the iron and steel construction. I may say, however, that the purchase was not made, because of public opposition to abandonment of the railroad. This law firm is at present closing a transaction in which Mr. Harris is interested, the same being the purchase of the equipment of a logging railway situated in the northern part of this State, the purchase price being a number of thousands of dollars.

I cite these concrete examples of the kind of business Mr. Harris has been engaged in here to my knowledge for your better information regarding the man. I have no knowledge of the extent of his interests in the matters wherein we have acted as counsel, or the extent of his income therefrom, or generally. He conducts the business in which he is engaged, in connection with his brothers, in this city and St. Paul, and also operates with and acts for Harris Bros. Co., of Chicago, who are well-known liquidators and carry on the most extensive business of the kind in the entire country, I am informed.

Mr. Harris has asked me to write a letter to you stating what I know of him as a business man, and I take pleasure in doing so. Because he has made this request, and because of my desire to correct the misleading statements referred to and to help you and your committee to a knowledge of Mr. Harris as he has shown himself to me, I am addressing this letter to you.

I am, sir,

Obediently, yours.

RALPH WHELAN.

THE NORTH AMERICAN BANK,
Minneapolis, Minn., March 19, 1918.

Hon. D. U. FLETCHER,
Chairman Committee on Commerce, United States Senate,
Washington, D. C.

DEAR SIR: These lines are written to you in behalf of Hon. Leo B. Harris, a member of the board of park commissioners of the city of Minneapolis, of which the writer has the honor to be the president.

That Mr. Harris is highly regarded in this city as a citizen and business man, is shown by the fact that he was elected a member at large of the board of park commissioners. The position carries no salary. As such official he has served very faithfully and with much ability.

While I am not qualified to say as to his ability to perform the kind of service that the Government is requiring of him, I do believe him to be a business man of sufficient ability to earn the compensation that the Government is paying him.

Yours, respectfully,

F. A. GROSS, *President.*

MIDLAND NATIONAL BANK,
Minneapolis, Minn., March 19, 1918.

Mr. D. U. FLETCHER,
Chairman Commerce Committee, United States Senate,
Washington, D. C.

SIR: Our attention has been called to the Hog Island investigation with reference to Leo B. Harris, and I beg to say that Mr. Harris and his father have been valued customers of this bank for some years and their relations with us entirely satisfactory.

Their dealings with us have been honorable, and we have been pleased to note the progress that they have made.

Respectfully, yours,

C. B. MILLS, *Vice President.*

WEED PARKER & CO.,
St. Paul, Minn., March 20, 1918.

Hon. D. U. FLETCHER,
Chairman Committee on Commerce, United States Senate,
Washington, D. C.

DEAR SIR: It has come to my attention that there has been some criticism as to the ability of Mr. B. W. Harris, who is now connected with the American International Shipbuilding Corporation at Hog Island.

I may say that I have had frequent dealings with Mr. Harris during the past few years when he was connected with the Chicago House Wrecking Co., located in this city. Mr. Harris impressed me as being a man of very considerable executive ability, and a man who was competent to handle a large business. He was at the head of the Chicago House Wrecking Co. while located here, and I understand that he used his own judgment in making large purchases for them.

Trusting that this information may be of some value, I beg to remain,

Very respectfully, yours,

P. C. W.

The CHAIRMAN (continuing). Mr. Baldwin, are you ready to proceed now?

Mr. BALDWIN. Yes, sir. We have finished with the testimony of all our own personal employees; and we want to present to the committee to-day three gentlemen, two of whom came to the plant as critics, to study it; and the third gentleman came as a totally unbiassed and impartial engineer to study the whole matter.

Mr. John R. Freeman is an engineer who has been consulted on practically all of the large and important engineering works of the country, including the Isthmian Canal. He will testify first.

Lieut. Commander Stevenson Taylor is the head of the American Bureau of Shipping, and as such is in charge of the rating of the vessels, as accepted, for insurance purposes; and Mr. James French is the head of the English Lloyds, whose duty it is to rate for the English rating.

The point of view of these three gentlemen, we felt, would be interesting to the committee, as they have all studied the yard at Hog Island from quite different standpoints from that of our own engineers.

I would like first to present Mr. Freeman. But, before doing so, Mr. Chairman, we have here [indicating] outline pictures of the two types of boats; and we thought the members of the committee might want to look at these pictures before we start; the members of the committee have not seen the two together before.

Mr. CONNICK. This picture [indicating] is the class B boat; and this [indicating] is the class A boat. This class B boat [indicating] is the 8,000-ton boat, and this [indicating] is the 7,500-ton boat. This [indicating] is simply an ordinary tramp steamer; and this class B boat [indicating] is a little bit different; she will be a troop ship, or a freighter.

Senator VARDAMAN. Those are the types of ships that are being built at Hog Island, are they?

Mr. CONNICK. Yes; there has been some criticism of the ships and what they look like.

Senator JONES. Those are the kinds of ships that were supposed to be described by Mr. Cotton?

Mr. BALDWIN. Yes.

The CHAIRMAN. How are those pictures made?

Mr. BALDWIN. They are made with water colors.

Mr. CONNICK. Those are made from the plans.

The CHAIRMAN. They are made from the plans, are they?

Mr. CONNICK. They are made exactly from the plans, by a naval architect, and then they had a man show the water in there, to make it look more natural. But that is exactly what the boats look like.

The principal thing you will notice is that, while these lines [indicating] are curved in an ordinary ship, the lines in this ship [indicating] are straight; for economical reasons, and for speed of production, they are made straight.

The CHAIRMAN. What disposition would you like to have made of these pictures?

Mr. BALDWIN. We thought the committee would like to have them

[illegible] the committee will be very glad to hav

much appreciate the [illegible]
them.

Mr. BALDWIN. [illegible]
those ships.

The CHAIRMAN. [illegible]
those ships will [illegible]

Mr. FREEMAN. [illegible]
state your name. [illegible]

STATEMENT OF MR. JOHN [illegible]

Mr. FREEMAN. I [illegible]
dance. R. [illegible]
somewhat more [illegible]
work, and [illegible]

The CHAIRMAN. [illegible]
shipbuilding?

Mr. FREEMAN. [illegible]
ral construction [illegible]
hydraulic [illegible]
improvement [illegible]
four-year [illegible]
Technology [illegible]
assistant engineer [illegible]
and union engineering [illegible]
tories. [illegible]
equipment with [illegible]
duties of [illegible]
factory [illegible]
acquaintance [illegible]
acquaintance with [illegible]
the governor of [illegible]
metropolitan water [illegible]
nearly $[illegible] [illegible]
tract. [illegible]
giving [illegible]
[illegible]
engineering [illegible]
principal [illegible]
my time [illegible]
engineer [illegible]
opinions [illegible]
Baltimore [illegible]
of engineers [illegible]
the Panama [illegible]
men [illegible]
American [illegible]
Society of Civil Engineers [illegible]
of Civil Engineers.

The CHAIRMAN. Have you looked [illegible] Mr. Freeman?

Mr. FREEMAN. I have, very carefully.

The CHAIRMAN. What examination did you make of it?

N. I spent the whole of three days in tramping ar
t g into every important building, and looking it
a r oming familiar with the general plan of operations in

had with me as my guide most of the time one of my fo
prin assistant engineers, whom I found there; and when I a
if ld go with me they detailed him to act as my guide—a
N p. He is a man that had been my principal resident
gineer when I was designing and building the Holter Dam in Mont
and was my principal engineer when I was acting as consulting
neer and auditing engineer on the Mississippi River power pla
Keokuk, Iowa; and I considered that I was very fortunate in ha
a guide with whom I had been long acquainted and with w
dependability I was fully conversant.

The CHAIRMAN. When were you there?

Mr. FREEMAN. I was there on Thursday, February 28; Wedne
March 6, and Tuesday, March 19. I spent substantially the w
day from morning until nearly dark in tramping about the grou
On my different visits I asked the officials to furnish me various
and plans, and I have taken those home and studied them, and
also made comparisons of the progress with other work with w
I have been familiar.

The CHAIRMAN. How did you come to go there? For what purp

Mr. FREEMAN. Mr. Baldwin asked me if I would go there and n
an impartial investigation of how the present situation impressed
as to the progress; and he submitted a list of questions whic
asked me to have in view, as to the suitability of site, general con
tion of the layout of the plant, the progress made, and the effici
with which the work had been accomplished, and the present out
for meeting the schedule of 120 ships in 22 months, and to mak
him any recommendations for improvement.

There were nine principal topics which he asked me to hav
view during my investigations, and I have tried to follow
schedule, and to comply with his request for an impartial investiga

The CHAIRMAN. Will you state just what you found, and
conclusions you reached?

Mr. FREEMAN. My first step was to get a large map showing
arrangement of the shipyard; also I called for a map showing
relation of the grounds to the lines of railroad and relation to
roundings, because he had asked me to give my opinion of the ada
bility of that particular piece of ground to this kind of work. Th
fore, my first consideration was the availability of transporta
the relation to the main trunk lines reaching to different parts of
country, and the location of the plant in proximity to a large
that could serve as a reservoir from which to draw laborers
mechanics immediately.

I considered that the essential points which should govern loca
on any site that might have been selected were, first of all, th
quickly obtaining a very large number of mechanics and labo
from among men who were living in their own homes, or in lod
houses, so that they could be set to work with all possible sp
without waiting to build an industrial village. It seemed
that one of the prime essentials of any large enterprise
where speed was one of the greatest considerations,

plant located near some one of the large industrial cities that could serve as a reservoir from which to immediately draw mechanics and laborers and miscellaneous building supplies.

And after studying the means of transportation, by steamboat along the Delaware River to the docks of Philadelphia and by street car line, which at first came somewhere within walking distance, and by proximity to the tracks of the Philadelphia & Reading Railroad, and the tracks of the Pennsylvania Railroad, with the great industrial city of Philadelphia on one side and Chester and Wilmington within easy reach on the other, I was satisfied that this site fulfilled that condition.

I am somewhat familiar with the manufacturing sites along the Atlantic coast, and I have been familiar with the selection of at least one other shipyard site and with the reasons which led to the selection of many other industrial plant sites, and as far as I know, or can learn, I believe no better site could have been selected than this for quickly obtaining the material and the men with which to build a plant and to lay down 50 shipways and to man those shipways.

Also it seemed to me that the relation to an uninterrupted flow of fabricated material was very important. The center of gravity of manufacturing is as near that point as any point that could have been selected, except New York itself, which was already a good deal congested.

I also studied the navigation charts, showing the depth of the river alongside of this island, and I found that the main ship channel, dredged to 35 feet, was hardly more than a ship's length distant from the end of the launching way, and it seemed to me that conditions for launching and fitting out the ships were very well met.

So that, as a whole, I believe that nothing better than, and I doubt if anything equally as good as, that island site could have been found for this particular purpose North, or South, or anywhere on the Atlantic seaboard.

The CHAIRMAN. Do you know the width of that channel?

Mr. FREEMAN. I have the widths in my map here [indicating], but I do not recall the precise dimensions in feet. It is ample for all purposes.

I have the impression that, opposite the shipyard, it is about 1,000 feet in width, or somewhere in that neighborhood. But I want the opportunity to correct that figure. I do not happen to have a scale in my pocket for measuring the map.

There is a sufficient depth there over an ample width. In the river outside the 35-foot dredged channel, immediately opposite the launching ways, there is a depth of 22 feet, which is much more than the ships will draw, and which extends for practically the entire width of the river; so that there is an abundant depth for five times the length of the ships immediately in front of the launching ways to receive anything that will be launched.

The CHAIRMAN. There is a sufficient depth for the launching of these ships and the handling of the ships that will be built at the yard?

Mr. FREEMAN. I believe there is.

Senator VARDAMAN. Well, there is not water enough until some dredging is done, is there?

Mr. FREEMAN. There still has to be some dredging between the ship channel and the site, but you can see here [indicating on

that immediately in front of the launching ways the strip that has to be dredged is narrow.

Senator VARDAMAN. How wide is that strip?

Mr. FREEMAN. It varies from nothing at one end to about 300 feet at the other; and then, when you get beyond that narrow strip of shallow ground, intervening between the flats and the deep-water channel, is a strip that is, in general, upward of 20 feet in depth, or more than ample for the purposes of launching the ships, which will be light when launched and draw less than their final depth.

I also considered the disadvantages of that site, in its low-lying, marshy quality, and the necessity for piles for shipways and for all of the heavy structures. But it seemed to me that those disadvantages were far outweighed by the great advantage of proximity to one of the very greatest centers of mechanical industry that there is on this continent. That is, Philadelphia is a great machine-shop center; and upstream from this island, only about 5 miles, were the works of the New York Shipbuilding Co., which were in ownership allied to the parties building this yard; and it was also near to the League Island Navy Yard—only about 2 miles. And it was within convenient reach for motor transportation for such early or preliminary supplies as timber for various buildings, plank for plank roads, and cinder fill for immediate grading of roads, and for a thousand and one kinds of materials that are needed in a hurry in the assembling and putting together of a great structural plant.

And although the roads part of the way from the city to Hog Island were originally very bad, and are still not what you would like for about 2 miles of the distance from Penrose Ferry to the shipyard site, I think, on the whole, it gave a great opportunity to get material there by motor truck quickly from Philadelphia, and always in a large job like this there are a great many miscellaneous supplies of small material the absence of which might hold up the progress on the main job.

Relative to the layout of the plant, as I have said, I am not a specialist in the design of ships, but all large engineering operations, whether it is the building of a large factory or the laying out of large power stations and dams, like the works of the Great Western Power Co., in California, for which I prepared the original designs and had charge of a good deal of the construction

Senator VARDAMAN (interposing). Who built that dam—what contractor?

Mr. FREEMAN. It was built finally by the power company. I had charge of it on force account for a while.

Senator VARDAMAN. What company was it built for?

Mr. FREEMAN. The Great Western Power Co.

Senator VARDAMAN. For Stone & Webster?

Mr. FREEMAN. No; they had nothing to do with that; but [illegible] the Mississippi River Power Co., where I was consulting [illegible] auditing engineer, they were the contractors. In that [illegible] River plant I had, when studying it a year before St[illegible] had anything to do with it, made out diagrams a[illegible] and schemes of operation, showing the order in [illegible] material should be brought on. As I started [illegible] are fundamentally the same in placing [illegible] material and erecting it according to pl[illegible]

power plant, factory, waterworks, or shipyard. To illustrate this matter, I may mention another case, that of the Hetch Hetchy water supply for San Francisco, Cal., where I had charge of the designs. I made the plans under which they are now slowly working, and in that I had to formulate the plans for bringing the material onto the ground for building the dams, the pipe lines, etc.

The point I wish to make is that the fundamental engineering operations are practically the same in any of those large construction works. You find the same contractors going from one job to another; sometimes building a bridge; sometimes building a dam; sometimes building power stations; sometimes building an aqueduct, like the New York Aqueduct; and sometimes building a canal. The fundamental operations are the same. These fundamental operations comprise the collecting of structural material, the sorting of it so as to have it handy for immediate use, and systematically arranged so that you can pick out a particular piece just when you want it and bring it to the point where it is to be attached to the main structure. And the experience of the Stone & Webster organization in their many enterprises would much of it be very useful at Hog Island.

It seemed to me that the fundamental requirements for laying out this particular shipyard plan were, first, the transportation of material and of men to the site; second, arrangements for assorting material into temporary storage until the time when it is needed to put into the plant; and then, third, the prompt access of the gathering-up cars to the stored material and its transportation from the storage bins to the spot where it is to be used, and then the quick access for men and for material, and for taking the partially fabricated material to the machine tools, in case there has to be any readjustment, or taking it to the lifting devices by which it is hoisted to the place from which it is lifted into the final structure. And then, too, the layout of mechanical shops close at hand, in which one can repair tools or can take any pieces which may have been injured in transit.

I was given complete ground plans and I went into every building, and after very carefully studying the plans I believe that the plant as it stands is admirably adapted to its purpose.

No two engineers, or no two contractors, would lay out a great construction plant like that on precisely the same lines any more than two men with a family of five to house would build precisely the same kind of a house; individuality would come into play in both cases.

But after studying things carefully, I certainly can see no material point in which the layout could be improved.

I think it is a remarkably fine piece of design for the purpose of assembling, constructing, and fitting out ships from parts fabricated at a distance, considering that speed is paramount, and that this method of building ships is a new departure from previous practice; [illegible] the fabricated ship requires an entirely original layout, a [illegible]t from that in the ordinary shipyard.

[illegible] with quite a large number of the principal American [illegible] have been a stockholder in the principal [illegible] and I have had engineering work to do [illegible] er Co., in Boston [illegible] harbor, and that of [illegible] which is half a dozen miles upstream [illegible] sion, from engineering interest,

to visit some of the chief shipyards in Europe; for example, Swan & Hunter's, which is one of the largest in the United Kingdom, and the Blom & Voss yard, at Hamburg, Germany; and I believe that I appreciate the difference in plan required by one of these yards, where the fabricating shops are right on the ground, within a hundred yards of the shipway, and a place like this Hog Island Shipyard, where the fabricating shop for some particular part of frame, shell, or machinery may be 1,000 miles distant.

For this new departure in shipbuilding it was of the highest importance that the railroad problem should be worked out with a good deal of care; and it seems to me that it has been admirably worked out.

It was essential that it should have some factor of safety; that is, that there should be a certain surplus of trackage, so that if you had an accident, or a delay, on one track, there would be means of getting around. I gave weight to the consideration as to whether, in the 5 miles of railroad tracks that have already been built at Hog Island, there were not more tracks than necessary; and my conclusion, after studying the plans, and considering the fact that two types of ships are being built there, where the plates must be kept separate and that the flow of material must be rapid and uninterrupted, my conclusion is that if there are extra tracks there, tracks which might have been dispensed with, they are simply in the nature of a proper factor of safety, to safeguard the main purpose, which is the turning out of ships at an unprecedented rate.

A measure that I have had in mind all of the time in trying to judge whether some features were extravagant or not, is the scale of operations. I might say that that is a habit that I have in considering engineering work. For example, at the present time I happen to be president and acting engineer of the Providence Gas Works, and I am putting in a $2,000,000 extension to the plant. In order to learn the value of speeding up or the cost of delay on this job, I figured up what the earning capacity of that extension would be and found that it was something more than $1,000 a day; and I passed the word all down along the line to our mechanics, our engineers, and our superintendents that anything that delayed the completion of that new plant a single day would cost the company $1,000.

I tried to find some similar criterion for judging the value of speed or the cost of delay and how much one might fairly spend beyond the bare necessities to obtain a factor of safety in this particular plant at Hog Island, and I found it in the estimated charter rate per ton for ships of this kind, which, if I understand correctly, is $10 per ton a month.

Taking that figure on the output of the yard, that means that the earning capacity of the whole fleet of 120 boats, which will aggregate 935,000 tons, will be $9,350,000 per month, or, dividing that by 30 days, the earning capacity of the fleet as a whole is $312,000 per day.

I think that this, with some proper allowance for the expense of maintenance of that fleet, indicates a measure of the proper cost, or a factor of safety that should be employed in putting down ample trackage and in building the subsidiary buildings of ample size.

That is, suppose one does put in a piece of track that cost $100,000 more than he could have got along with by skinning things down to their lowest terms. I would say that this $100,000 of [illegible]

ment in plant might be economical insurance, considering the great value to the country of getting the fleet at work promptly.

The CHAIRMAN. I think they have something like 65 miles of track at Hog Island. Do you regard that as excessive?

Mr. FREEMAN. I think that there is planned to be about 65 miles. If I remember right, when I was there, only about 50 miles had been laid; the yard C, at the extreme northerly end of the island, was not built; and when I mentioned 50 miles a few moments ago, that, if I remember right, was the figure that was given me at the time of my latest visit to the island; and I saw that part of the tracks were not then laid.

No, I regard that the necessity of a part of that trackage of 65 miles—it may be 10 per cent, or it may be 20 per cent of the whole—is largely within the twilight zone of judgment; one man of good judgment might think more was necessary, and another, also a man of skill and judgment, would take a chance on getting along with less; and I would not attempt to say the precise number of miles that was correct. But I think that the general idea or spirit of having it ample was commendable; that whatever there is above the bare necessities is nothing more than safe insurance for maintaining the flow of material.

The current rate of earnings on the tonnage basis for each individual ship is about $2,600 per day, and the value to the national defense in the present great emergency may be even greater; and we must not overlook these plain hard facts when passing judgment on what we find for safeguarding speed of production at Hog Island.

I may say at this point, although it is digressing somewhat from the notes that I prepared so as to try to get my ideas together for presentation in an orderly way, that I am familiar with a great many manufacturing plants. About one-third of my time for 20 years past has been spent as president of the Manufacturers' Mutual Fire Insurance Companies. They specialize wholly in large manufacturing plants, like the Westinghouse Co., the General Electric Co., or the Ford Motor Co., or the Cadillac Co., and about four thousand others. We insured the New York Shipbuilding Co. and the Fore River Co. for many years. This work is wholly along engineering lines; we try to prevent fires; and we have a corps of about 50 engineers who are on the job all the time, working on these matters of fire prevention. That has brought me into a great many factories.

And when I first went to the Hog Island shipyard and comprehended the plan, it impressed me that this was laid out on very much the same principle by which Ford has so cheapened the automobile and has put out such a vast number of them—that is, I have visited the Ford plants, and have visited the works where the different parts of the Ford automobile are fabricated. I have seen, for instance, their drop forgings made in Cleveland, Ohio, and have seen other parts made in other parts of the country.

For a long time the Ford plant at Detroit was largely a great assembling plant for mater[illegible] in different places. These fabricated parts were brou[illegible] toward the traveling platform at one end of [illegible] where the material was assembled, and out [illegible] shop came a steady stream of automob[illegible]

Now, it seemed to me that here at Hog Island there was a great analogy to that plant at Detroit; that there was something unprecedented in the history of the world in shipbuilding, and that it had been laid out on a very similar line, with a very similar conception, and that the great feature of the yard was the transportation feature, and that everything pertaining to transportation must have the utmost care.

I have for a good many years been interested in a general way, though not as a specialist, in this effort to speed up shipbuilding.

For example, I have been a frequent visitor to the shipbuilding yards at Sparrows Point, near Baltimore, and I was a visitor quite a number of times, through engineering interest, at the New York Shipbuilding Co., when it was first being laid out and developed, and I took a great deal of interest in talking with the engineers and in the plans which they unfolded to me for building a ship there at Camden faster than it had ever been built before. For a long time lack of business prevented that plant at Camden from showing what it could do; it was relatively idle; they did not get the opportunity to do what they had expected to do, but I was interested in the principle, and therefore once when in England took the opportunity to see the prototype of this Camden shipyard, largely as an outcome of my interest in this program for speeding up shipbuilding which I had been shown by Mr. DeCourcey May and other engineers at the New York Shipbuilding Co.

So, I regarded the work done here at Hog Island as simply going one stage further, and that new standards must be adopted by which to judge this plant and the general layout of the yard. I find, for example, that in this particular shipbuilding scheme, where everything is designed on the drafting board and practically 85 per cent of all the plates will be fabricated at a distance, and so accurately shaped and drilled that they can simply be put up against the ribs of the ship and riveted into place, without trying and fitting, a very different process and very much more ample storage yards are required than under such methods as I had seen in other shops, where a large part of the plates are individually fitted by "trying on" and not prepared in advance.

In studying the reasons for this extensive transportation system here at Hog Island I found it necessary to go back to the plans of the ship itself, and I was shown how every plate on every line of the ship bore a particular letter and number, and that out in the storage yard there is a bin where pieces of that particular letter and that particular number are stored as fast as they are received from Chicago, Montreal, Baltimore, Pittsburgh, or wherever it may be that they are fabricated. By being able to have a certain reserve of parts in that bin, so that when the orders of the day come along a delivery train [illegible] be made up, comprising several carloads of the particular [illegible] direct sequence, this train with its sequence of plates order[illegible] can be brought without delay or confusion directly al[illegible] ship that is in building. This special method saves t[illegible] vastly more trackage than any shipyard that I [illegible] before. I have taken these facts into considerat[illegible] that I believe there has been no real extrava[illegible] of track.

Another question that was asked me by Mr. Baldwan was to study and give my opinion upon the progress actually made since they began work and to review the amount of the material put into place from week to week since the contract was signed about the middle of September.

I am personally familiar with the uncommonly difficult conditions during the past winter through other work on a very much smaller scale of which I have had charge. I know that certain buildings I have had going up during the winter have cost probably double what they would have cost in normal times. That is, there were days on some of my work when I did not think we got 25 per cent efficiency out of the masons, bricklayers, or concrete men because of the severe winter conditions.

In these matters of delay and of extra cost due to the uncommonly bad winter, I wanted to get exact information and not generalities; so after talking with a number of engineers that I found on the ground whom I had known on other engineering work in various parts of the country I asked the assistant engineer to have prepared for me definite temperature records of conditions in Philadelphia during the past winter showing the temperature every day and the depth of frost, and I took those into consideration in reaching my conclusion. I also had prepared a chronological table of the various engineering operations as they came along.

I find that the contract was signed September 13 and the first surveyors got on the ground September 15 and the weather continued mild all through September and fairly mild right through the month of October. But during the six weeks or two months of mild weather there were no transportation facilities to the ground. There had to be several miles of railroad built to connect with the Pennsylvania road and the Reading road and there had to be about 2 miles as I remember of very bad highway track cobbled up so that the motor trucks could get over it. The ground of the shipyard itself was marshy and too soft to carry the wheels of a 5-ton motor truck and just about the time it was possible to get fairly good transportation to the ground the cold weather began. That is, during the months of mild weather there was not building material on the ground with which to begin; automobiles bringing various things essential to the work could not get on the ground during the earliest days because of the softness of the ground, and meanwhile railroads were 2 or 3 miles distant and the intervening roads were very bad.

About as soon as building material could be gotten there in any quantity the weather became very severe, and the percentage of stormy days became very large. I have diagrams here, showing, for example, that about the 10th of December the maximum temperature during the day was 10° below the freezing point; about the 12th and 13th of December, there were very severely stormy days, combined with low temperatures; and all the rest of December the temperature was either hovering right around the freezing point or it was below it; and there was an uncommonly large number of [illegible] The month of January was still worse; the temp[illegible] time below the freezing point. The [illegible] the periods of rain or snow [illegible] an uncommonly large [illegible] of January.

The CHAIRMAN. That was probably snow instead of rain?

Mr. FREEMAN. Yes; at that temperature it would be snow ir of rain. In February the temperature continued below freezi the time, even at noon, during the first six days, with the (tion of a single day. Then the mean temperature did, for days, get up to 40, but there was still a large proportion of s and stormy days, and very considerable periods when they had peratures down to zero.

As an illustration of the effect of this cold, stormy weather (labor problem, I will say that I happen to have a carpenter w for me now who was at Hog Island for a few days. On being why he left a job where the pay was so high he said, "You cou hire me to work at such a bleak and uncomfortable place a was." And I think many other workmen that came there h same opinion.

I have the figures of their turnover of men on the construct Hog Island, and they indicate that it was very hard to get n go down there on that bleak, marshy place during zero weath do a fair day's work.

I am getting a little ahead of my story.

I want to say something about the time that it commonly ta get a big job like this into full swing.

I have had connection with the early stages of organizing quite large pieces of work. I was one of the original memb the Metropolitan Water Board of Boston, which built the addi works about 20 years ago, and very clearly remember the (incident to the getting together of its engineering organizati made additional plans for the present Catskill Aqueduct supp New York City, for the finance department of New York; and afterwards, when legislation was passed creating the board of supply, I happened to be the first employee of the board. asked to become chief engineer, but could not accept, becau other engagements, but became consulting engineer and was in getting together their engineering organization, which height comprised several hundred engineers. And so I know a slow process it is ordinarily to get together an organization of class men; that is, to get good men and put them together in monious efficient force. It takes time. I have considered tha and my own experience on these other jobs in relation to wh been achieved here.

To sum the whole matter up, I am very strong in the belief considering the adverse conditions, the progress at Hog Islan been remarkably good. I think it is almost beyond belief, a goes there and sees that mile and an eighth of ship ways on the front of about 2 miles that has been brought into shape and m veritable hive of industry. It is almost impossible to realiz that has been done, not in the five months since the signing (contract, but practically within the last three months, since th of transportation have been well opened; and particularly won when one considers that the first two months of these three prised the most bitter winter weather that we have had in thi of the country within the memory of the eldest inhabitants.

I was asked to give my opinion in a general way, speaking br of what I would estimate the natural increase in cost of doin

work under those adverse conditions would be. I have not attempted to make any detailed analysis of costs per cubic yard or per foot of pile driven, or by any of the ordinary engineering unit costs; but I nevertheless have some judgment on that matter, through other work that I have had in progress. That work, of course, is nothing like as large as this, but it gives a certain measure of loss of efficiency through the adverse labor conditions and the adverse weather conditions of the past winter. I have not compared my estimate of this increase in cost with any figures that the shipyard officials may have, but my judgment is that the labor cost would be at least doubled by these conditions; and if you rushed in a surplus of men to make good for the bad weather and put in more men than you normally would put in, in an effort to hold up your progress in spite of the weather, you would increase the cost in a similar ratio. The loss of efficiency or increase in cost would vary among different parts of the job. The efficiency of the men who are employed in the shops, who are sharpening drills or repairing tools and apparatus, would not be materially reduced except for the unusual [illegible]

But the greater part of this work in the preliminary stages was not under cover; it was in the open, out where the wind ran a full sweep and where the men were exposed to whatever kind of weather there was. In a good deal of that work I [illegible] efficiency would be only, say, 25 per cent of normal efficiency, such as they would have had if [illegible] with material in hand [illegible] in the months of comfortable [illegible]

Whenever you have an [illegible] ally hiring and firing [illegible] class of men, that [illegible] inside work, does not [illegible] it takes some time [illegible] house, to know [illegible] and the general [illegible] main only for a week [illegible] the next job, that [illegible] tent.

Therefore, taking the [illegible] judgment based on a good [illegible] tailed analysis. I would [illegible] doubled by the adverse [illegible] pect to be very great [illegible] handling material, [illegible] motor trucks, but [illegible] probably large, except [illegible] believe from my own [illegible] carloads of ballast [illegible] frozen condition, and [illegible] where ordinarily [illegible] flow out, this material [illegible] out by hand at [illegible]

I have had that [illegible] past winter. The [illegible] pound the mass to [illegible]

every reason to believe, from what I saw at Hog Island, that a good deal of their ballasting material came in under those conditions.

This yard as a whole was marshy land, and the surface of three-quarters of the area was river silt, which turns up into mud under foot or with the use of teams, and for drainage and facility of working later on it is necessary to put a porous material—a coating or ballast which averages, I would say, about 18 inches in thickness—over a great part of that area. A good deal of that material was brought in under those conditions, so that it could not be delivered and spread as easily as it would be normally.

Some of the ballast came from gravel accumulated while dredging out the channel opposite, and that had been dumped along the shore at the upstream end of the yard. That material, which under normal conditions could be taken out very easily by steam shovel, was frozen and could not be taken out at anything like normal cost.

At the time of my first visit to the island, in February, the frost was still very much in evidence. I saw places where steam shovels were trying to dig some of the ditches, where there was still a coating of, I would say, 18 or 20 inches of frost left. I asked the engineer at the yard, who was my guide, to inquire from the water department at Philadelphia what their records would show as to the increased depth of frost in the ground during the past winter in comparison with a normal winter. You understand, in any water works distribution system you have to be continually making repairs and new connections during the winter, and so water works companies have generally a very good record of the depth of frost in one season in comparison with another. I was told that the average in Philadelphia during the past winter was 42 inches depth of frost, in comparison with a normal of about 24 inches, and I am informed that this same water works engineer said that the cost of their pipe repair work and street work during the past winter had been double the normal cost.

The shifting labor I believe has been a great element in the very large cost of this work. I asked them to prepare tables for me, showing how large the turnover had been. I think that is a general condition; it is not prevalent alone at Hog Island, but has prevailed for all of the past winter, and to a great extent the winter before, in many parts of the country, particularly on outdoor work, but also on shop work, and has been, I believe, growing worse all the time. I know that in maintaining our forces at the Providence Gas Co. we are having more difficulty than we have ever had. Labor in general seems to be getting more restless and exhibits less stability, more of a tendency to shift from one job to another.

I was told the number of men in the yard at the time of my last visit was about 22,000, and I am told that to get those 22,000 men they have hired over 86,000 men. A great many of those men have gone out there for only one day, some of them have stopped only for a week, and some only until they could get a pay envelope big enough to move on to some other job. The figures that were compiled for me show that the monthly turnover has averaged 160 per cent. That is, the average number of employees for the three months, after they got fairly at work—December, January, and February—was about 12,000. To maintain that 12,000 they had to take about 20,000 new names on to the books each month on the

average. I think that while that could have been foreseen to some extent, it could not have been estimated in the beginning as being quite so bad.

The CHAIRMAN. Did you observe idle men standing about doing nothing, to any extent?

Mr. FREEMAN. Why, not to any alarming extent. You never get 100 per cent efficiency on any work of that kind. There are always some men waiting for some other gang to get out of the way. It is very much the same as if you have a plumber working on your house; he has at times to wait for the carpenter to do some cutting. And in going about any large engineering operation you will always see a certain number of men who are waiting either for a particular truckload of material to arrive or for some other gang to get out of the way. But in all of my visits I found nothing that was at all out of the ordinary, and I should say that average, or better than the average, efficiency was being maintained.

The CHAIRMAN. Did you see any evidences of waste?

Mr. FREEMAN. No. To some extent haste proverbially makes waste. For instance, in your stagings you can not use lumber over again on a rush job as you could on a slow job, and there will be cases where you will not have the particular size of timber that you would like to use, and so you will use the next thing that comes handy. But take the matter by and large, I do not think there was any more waste than I have seen on a dozen construction jobs or than you will commonly see.

Senator VARDAMAN. May I ask you to state again the days you were there? It is not clear in my mind.

Mr. FREEMAN. I was there Thursday, February 28; Wednesday, March 6; and Tuesday, March 19.

Senator VARDAMAN. Are those the only times you have been there?

Mr. FREEMAN. Those are the only times I have been there.

It is idle to expect 100 per cent perfection either in a gang of workmen or in the cutting of material or in any hurried construction operation of this kind.

The CHAIRMAN. Mr. Freeman, are you acquainted with the contract made with the American International Shipbuilding Corporation?

Mr. FREEMAN. In a general way. I have not seen the whole contract, but I have heard it discussed. I do not know it in detail.

The CHAIRMAN. Do you know about their fee of 5 per cent on the estimated cost of a boat? For instance, if the boat cost $1,100,000, their fee would be $55,000.

Mr. FREEMAN. I had an idea it was a little different from that, and I understood that the fee in round numbers came practically to 3 per cent or 3½ per cent as a whole. It may be as you say; I have forgotten.

The CHAIRMAN. You understand, they got no fee for building the plant; their fee is simply as to the ships. Taking the whole contract together, the fee may be about some such per cent as you have mentioned, but they get no fee for superintending and looking after the building of the plant. They get their fee of 5 per cent on each ship that is built. From your experience, what would you say regarding the reasonableness of that compensation or fee?

expenses. That was the best trade we could make in t
Every one that I went to for this particular kind of work
will not enter into a straight lump sum-contract under t
tions. The only thing we will do is to make a cost plus
And the best offer I got on any of this work is 10 pe
contract which would involve something like $300,000: th
the work is at 15 per cent, and that is for a pretty good
tract, and the contractors have built hundreds and th
pieces of apparatus of this same kind.

Senator NELSON. But have you taken into account th
the Government practically furnishes the yard in this in
furnishes the shipyard and pays for the rent of the groun
the cases you have mentioned, the contractor does not
plant. Have you taken that into account? These con
you refer to are not of that kind, are they?

Mr. FREEMAN. Not precisely of that kind, but they
to some degree. Take our work for the Catskill Aque
illustration. That work was comparable with this, b
expenditures up to date have been $138,000,000. The
does his work slowly, and the payments required under t
from month to month are for everything performed up to
or 20 per cent of the amount of the work in place, so tha
city of New York was virtually putting up all but 10 or 2
of the capital. That is, it is commonly assumed by the
that if they have a plant and have capital enough to
first month's pay roll, first month's work, then the city c
along by these monthly payments of everything except t

Senator NELSON. But in this case, the case of Hog
Government pays all the expenses of building the plant.

Mr. FREEMAN. Yes.

fact that the Government has an investment in that yard, or will have, of $40,000,000?

Mr. FREEMAN. Yes.

Senator NELSON. That is furnished free to the American International Shipbuilding Corporation—the ground and everything else. Have you considered that?

Mr. FREEMAN. I have.

Senator NELSON. In addition to that, most of their working force, their expert force, their engineering force, is paid, not by the company, but by the Government.

Senator VARDAMAN. In fact, is it not true that all of it is paid by the Government?

Senator NELSON. Nearly all of it, except three or four head men. Practically all of the overhead expenses that ordinarily occurs in an engineering operation, in the shape of these expert employees, is paid by the Government. Have you taken that into account?

Mr. FREEMAN. I have; and that is why I considered that the fee of 3½ per cent on this work which they have designed is justified, instead of the ordinary fee of 10 per cent.

Take my own work for the Providence Gas Co. That work is all erected on ground owned by the Providence Gas Co., and we pay them practically 75 per cent of the cost of all material and labor delivered on our ground as soon as it is delivered. That is, the contractor does not pile up an investment of $1,500,000 and then get from us a check for $1,500,000: they are paid month by month within a margin which is very close to the real cost. In this case it seems to me the difference between the ordinary contract and this contract is that this 20 per cent which is commonly held back is in this case paid by the Government.

Senator NELSON. How can you figure what the overhead expenses of the International Shipbuilding Co. are when, as a matter of fact, all the working force of experts, except one or two men, is paid by the Government? How can you figure overhead expenses for them, when the Government bears them itself?

Mr. FREEMAN. There is nevertheless an intangible expense there.

Senator NELSON. Is not that rather visionary?

Mr. FREEMAN. No, sir; not at all. The man who did not have the vision to see it would finally "go broke." It is a very definite, distinct expense, and I would like to say a word on that.

Senator VARDAMAN. Mr. Chairman, there is a roll call in the Senate, and it will be necessary for some of us to leave. Before we go I want to suggest this, that there is also another item of expense to be considered in that connection, and that is the additional 5 per cent which is paid to the subcontractors.

Mr. FREEMAN. May I reply to Senator Nelson in just a word more? There is one matter I had forgotten to speak of. I have noticed in the newspaper accounts a good many references to the Government's paying so much for the "know how." It seems to me that is a very unfortunate expression. I regard the "know how" as only one of the items. It seems to me that the item of possessing an effective organization, immediately available, is what you are paying for. It has cost those men a great deal to accumulate that organization, and that is part of the overhead expense.

Senator NELSON. I think that is where you are wrong. They did not furnish an organization when they took this contract; they formed an organization afterwards. They picked up men from all over the country. They picked up, for instance, three men from the State I represent here, and brought them on here and loaded them onto the Government at exorbitant salaries. Do you call that building up an organization?

Mr. FREEMAN. I do not know about those three men, but I do know about many excellent men that I met there whom I know had been members of the Stone & Webster organization for many years.

(Thereupon, at 12.10 o'clock p. m., a recess was taken until 2.30 p. m.)

AFTER RECESS.

The committee met, pursuant to the taking of recess, at 2.30 o'clock p. m.

The CHAIRMAN. Mr. Freeman, when we adjourned were you discussing some point that you want to continue on now?

Mr. FREEMAN. Yes. I consider, Mr. Chairman, that one of the most important things the Government got when they engaged this American International and Stone & Webster concern was the organization which it had been building up for a great many years. In my various visits to the Hog Island shipyard I have met many men whom I had met previously in various parts of the country on work in which Stone & Webster had been interested.

For instance, I found on the ground Mr. Albert Northrup, who had been my assistant on the construction of the Holter Dam in Montana, which was primarily a Stone & Webster job. I took Mr. Northrup to that work, and after that was finished he went with Stone & Webster and has been with them most of the time since. So I know it was through the Stone & Webster organization that Mr. Northrup was brought onto this work. I took him originally from the position of resident engineer of the Ashokan Dam of the Catskill water supply. He is an extremely capable man and a man I would be glad to have on any work of this kind. He was my right-hand man on the Mississippi River Power Co.'s work. He is an example of a man whose services were secured through the organization.

I found also on the work Mr. William L. Locke. Mr. Locke was the general superintendent of construction on the Holter Dam in Montana, and I had subsequently met him on engineering work of the Stone & Webster organization in Seattle, and I had known of his work on the Big Creek power plant for Los Angeles, and I know he is an exceptionally capable man.

I found also on my first visit—I did not find him later, Mr. T. A. Carr. I knew Mr. Carr first in connection with the electrical works at Minneapolis and later in charge of the buildings for the new Technology in Boston, both of which were Stone & Webster enterprises. Mr. Carr, I believe, has left; that is, as I understand, he was engaged temporarily and has performed his duties, and he was no longer there at my last visit.

Mr. Manning, the assistant superintendent, I had met first as an assistant engineer on the Hauser-Lake Dam on the Missouri River.

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where one head [illegible]

Also I [illegible] Mr. Anthony was the [illegible]
Mr. Dexter [illegible]

I also met Mr. [illegible] the construction [illegible] & Webster man [illegible]
contractors of the [illegible]

Mr. Clark was also [illegible] Stone & Webster [illegible] the Keokuk work years ago. Mr. [illegible] and Stone & Webster were [illegible] had met on the Keokuk work.

Those men I met merely by chance as I was going around under the guidance of my old assistant, Mr. Northrup. He would see one of them and say, "There is a man you know," and I would have a few words with him. For all I know there are a great many other Stone & Webster men.

I was invited on the evening of my second visit to attend a meeting of the engineers connected with the organization. They had formed what was known as the Pull Together Club, and this Mr. Northrup was to give a lantern-slide talk on some of his experiences in South America for Stone & Webster, and he invited me to be present. I found a large number of men there whom I can not attempt to recall now, but men whom I had met in one part of the country or another as members of the Stone & Webster organization. So I believe Senator Nelson was not fully informed when he stated this noon that Stone & Webster did not bring an organization to this work.

I have had some contact, too, with the American International Corporation, in New York, and I have met some of the men who are connected with that organization, and I am strongly of the opinion that one of the greatest factors contributing to the success and speed and economy which the Government got was the obtaining of an organization which this firm of Stone & Webster and the Stone & Webster Engineering Corporation had been for more than 30 years developing.

You can not go out and set traps at street corners and catch a good organization. It is a very slow process building up an organization. As I said this morning, I had a very active share in every

the engineering forces for the building of the Catskill acqueduct for New York City and also for building the extensions of the water supply in Boston, and in each case it took us months to get together an organization of men who had the initiative and the energy and the sanity of judgment and balance, men who would get along well with the contractors and had executive ability, the qualities that go to make it up. I think, for instance, if a naval officer or Army officer had tried to collect from civil life or anywhere else an organization to do that work with the speed with which it was desired to do it, he would have been fully three months behind the condition in which I found the work, by reason of the time it would have taken to get an organization together.

The CHAIRMAN. Is that not largely what may be designated, or has been designated here, as the "know how"?

Mr. FREEMAN. Yes; I think the "know how" was an unfortunate term. The "know how" is just a part of it. You hire a consulting engineer. He is supposed to know how, but you have got to have also men to plan and to execute. One man may know how, but in work like this you have immediately got to bring a hundred men to the work. That is, they have had to take these men that they were able to pull from their different enterprises all over the country, and make them a nucleus around which to fill in other men. In that way they got together an organization with wonderful promptness.

Within the first month after the contract was signed they had 300 men in their engineering and clerical force. Those were not all engineers; I have not the engineers listed separately. But within three months they had practically reached the first peak in their engineering organization; that is, their engineering and clerical organization had been worked up to about 800 men. Now, it would have been impossible to get that number of efficient men unless you got them from a concern that had been slowly developing an organization for quite a good many years. When you start in to build up any work of this kind and look around for good men you will find that about nine-tenths of the good men already have good jobs. That is, the good men are busy, and the men that pester you for positions are, three out of four of them, men that you do not want. They are the derelicts, the left-overs, the men that do not get on well with their work.

The CHAIRMAN. If the Government had undertaken to build this yard and build the ships, it would have meant a delay of several months to begin with?

Mr. FREEMAN. I am very clear, from my experience, that it would have meant at the very least a delay of three months beyond what I have already found. I have no doubt—I am sorry the Senator who started this line of inquiry is not here—in making up any large organizations you get some undesirables and you have got to continue the process of weeding. I have never seen an organization yet, on starting a large construction work, that you did not get in some men whom you would let go after a while for the good of the service; but my whole impression from what I saw there was that their average quality was remarkably good.

As to the salaries which these men received. The Senator said something about "exorbitant salaries." I inquired a little into the salaries of a few of the men, and I think that a wrong impression has

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good and attracted attention and he has had work from Stone & Webster practically whenever he has wanted it, and I presume he will continue to have it.

One word more as to the delays: I spoke this morning of the delay incident to the very bad weather during the winter, and the delay at first due to the muddy condition and the absence of good roads; that is, it was nearly two months before they could get much building material in there.

There is one other reason for delay, as I am informed—and I have the plans that demonstrate it, they having been shown me to exhibit the changes that were made after the yard was first laid out.

They first planned and began their work with the instructions that all of the ships to be built here were to be of one type and size. That required only one set of sorting bins; that is, a set, we will say, of 1,000 compartments each, a sort of gigantic pigeon hole, in which they would put, for example, all the parts marked "B23" and into another compartment all the parts marked "X97." A yard of that sort is a very expensive affair with perhaps 5 or more miles of railroad tracks in it. After the builders of the shipyard had got well under way the plans were changed and it was decided to build two types of ship. That involved a very radical change in providing two of these storage yards; that is, there were two different kinds of plates, and you could not risk the confusion of storing those in one yard; for example, suppose you are building a ship of the 15-knot class located on one particular shipway. Your train goes to pick up plates and angles and shapes and fabricated parts in the morning, which carloads are to be switched around and taken down alongside that particular ship. For economy and for lessening delays and costs incident to mistakes you must have your yard arranged so that you will be picking up plates on that particular train only for that particular ship. Then, in another part of the yard you will be picking up plates for another shipway, so that I believe that this change of plan and the building of two sorting yards was essential and that it will contribute to the final speed and execution of the program. The fact that they did radically change their plans and provide two of these storage yards instead of one delayed the putting in of these tracks and the progress as a whole.

The CHAIRMAN. And added to the cost?

Mr. FREEMAN. And would add somewhat to the cost; probably that would not be such a very large feature of the cost.

As to the conditions as I have found them during my visits: I was asked to direct attention to the question of how things are coming along, and after reviewing conditions gave Mr. Baldwin my opinion as to the success of the program; that is, whether the fabricated ship, as such, was going to be a success.

Therefore at the shipways where a keel was already laid and where the bottom plates were being put together and riveted up, I made particular examination of the fairness with which the rivet holes were coming together and the accuracy with which the plates and different parts were coming together; and all that I saw was very satisfactory and indicated that you can do this work of fabricating a particular piece a thousand miles away and have it come onto the ground so accurately drilled and shaped that it will go together and make a good strong efficient ship. I believe that there is no reasonable

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The CHAIRMAN. [illegible]
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Mr. FREEMAN. [illegible]
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Mr. FREEMAN. [illegible]
as I said this morning. When he asked [illegible]
what he wanted me to look into [illegible]

Senator JOHNSON. Did you go there under any [illegible] Mr. Freeman?

Mr. FREEMAN. I hardly know at first whether it was under any [illegible] ment or not. I would have gone there without any thought [illegible] retainer or anything of the kind just as I have been coming [illegible] Washington for six or eight months past as a member of the [illegible] tional Research Council and on other matters where I have [illegible]

to help along the national defense. I have spent a great deal of my time here for several weeks past trying to help along various parts of the program without ever a thought of a fee.

Senator JOHNSON. What is the fact in relation to your particular work—were those visits on that work to be compensated for?

Mr. FREEMAN. There has not a word been said about that. I think that since I have put so much time into it I will send them a bill; but there has not been a word said about it. I think it is entirely proper that I should send them a bill.

Senator JOHNSON. I was not questioning that, but I wanted to ascertain whether you are testifying as ordinarily an expert testifies—under compensation, or not?

Mr. FREEMAN. I was not asked to manufacture testimony. I was asked to go there and give them my impression of the truth.

Senator JOHNSON. There has been no suggestion of "manufacturing testimony," I am sure—not by me or by any member of this committee—but the question I desired answered, if it can be answered, is whether you are an expert witness here under employment, accepting compensation for the testimony or for the work that you have done in connection with the testimony you are giving.

Mr. FREEMAN. I expect now that I shall send them a bill.

Senator JOHNSON. Yes, sir.

Mr. FREEMAN. When I first went there I had no special thought of that; I did not know just what was wanted of me.

Senator JOHNSON. Has the amount of that compensation been discussed at all?

Mr. FREEMAN. It has never been suggested in any way. I have not made a single entry in my accounts and have not given that matter a thought.

Senator JOHNSON. I do not wish you to misunderstand me. I am not questioning either the right of these gentlemen to employ you, nor the propriety of the expense of that employment, neither the one nor the other. But it is fact, of course, that is always pertinent to ascertain whether or not a witness has been employed for a specific purpose. Now, we may take it that that is the fact in this instance?

Mr. FREEMAN. Yes, that is a fair assumption up to date.

Senator JOHNSON. All right, sir.

Mr. FREEMAN. But I would like to qualify that by stating that for five years past save in only one instance, I might almost say in 10 years past save in only two or three instances, I have declined court employment as an expert witness. It is a kind of work that I do not care for, and I have plenty of other work, and I do not like it and keep out of it; I would have declined this work if coming here solely as an expert witness; that is, I prefer to be on constructive work like your Hetch Hetchy water supply or the Isthmian Canal or the New York water supply rather than on the ordinary range of expert wo

Senator JOHNSON. In the past have you been in the emplo at all of Stone & Webster or of the American International

Mr. FREEMAN. They have called me in a number of tim

Senator JOHNSON. On big undertakings?

Mr. FREEMAN. Yes, on the Mississippi River Pow

Senator JOHNSON. Was that employment lucr

Mr. FREEMAN. Fairly so; yes.

Senator JOHNSON. Other than Stone & We International at any time employed you?

Mr. FREEMAN. They have asked me to get together an organization to go over to China to study the reopening of the Grand Canal to navigation, and I am on that work now.

Senator JOHNSON. When was that employment, if you please?

Mr. FREEMAN. I would say it was about three months ago.

Senator JOHNSON. Did you have any relations with the American International just after the formation of the corporation?

Mr. FREEMAN. No; except purely friendly relations. I recall that I had proposed taking a winter away somewhere, either in the Orient or in France, and Mr. Stone asked me if I would not look up the possibilities for water power in France for the International Corporation, in case I cared to go over there; and then when I was in China last winter he suggested that it would be pleasant if I got in communication with their representatives in Peking; and my relation there was purely a friendly relation, that is, going out to the Chinese Wall with their chief engineer to study the masonry and such matters of engineering interests. I have never received a dollar of compensation from the American International, though I expect I will if I am successful in starting this work in China.

Senator JOHNSON. Are there any of the other corporations allied with the American International or with Stone & Webster with which you have been connected?

Mr. FREEMAN. They were the contractors on the Holter Dam in Montana, and when they got into difficulties with some very bad foundations they asked me if I would go out and give my opinion of the feasibility of building a safe dam there. They have several times called me in in a consulting way.

Senator JOHNSON. That is the point I was reaching. It is quite a fact, is it not, that in matters of very grave import Stone & Webster have used you or utilized your services as a consulting engineer?

Mr. FREEMAN. They have.

Senator JOHNSON. And how long a period has that extended over?

Mr. FREEMAN. I have known them ever since they started business. It so happened that their guiding philosopher and friend was one of my particular college mates, and I was in almost at the birth of the organization, and have had that friendly relation. But I do not remember anything for which I received compensation until, I would say, perhaps seven or eight years ago.

Senator JOHNSON. That is all, sir.

Mr. FREEMAN. Mr. Baldwin had asked me what I thought of the scheme of putting down 50 shipways all at once; in building them simultaneously instead of putting down only 10 ways and finishing those and then going on to another 10. After looking into the matter I believed that in view of the urgency of speed that it was wiser to put in the 50 shipways all at once, the five groups, because I find that in doing that they brought five different engineering organizations and contracting organizations onto the ground, and three of [illegible] organizations I happen to have known of for a great many [illegible] now I think it is much better to clean up the situation of [illegible] shipways first, and get the plant construction gang [illegible] as possible and not have the confusion of plant [illegible] with the shipbuilding work. The ship- [illegible] require a great number of men working di- [illegible] bling material. I think it is much bet- [illegible] problem and the difficulty of housing

and transporting those men by having the two sets of men there at once, if you can avoid it; and I think that in view of the fact that they were able to find those five organizations of contractors that could come there and each work individually as a unit, that it was decidedly helpful to carry on the full number of 50 shipways simultaneously.

As one looks back at it to-day and goes on the ground and finds, perhaps, 20 ways far enough along so that they can be receiving steel and no steel on them because they have not been able to get hold of it, the first thought would be that a lot of that extra expense of last winter might have been saved by having a smaller number of shipways in progress during the cold weather. It seems to me that that is simply the difference between a hindsight and foresight. At that time it was expected that the steel would come just as fast as it was wanted; that the shipways and the facilities for riveting plates, the towers for erecting, and all those things would be the slow spot on the job, and so I think that planning in the beginning that it was certainly the proper way to put down the 50 ways and push every one of the 50 just as fast as you could, on the theory that out of these many places all around the country where steel was being fabricated that they would get enough to start work just as fast as men could be found.

Mr. Baldwin also asked me what my opinion was as to whether they could make good with their program of building 120 ships within this period of materially less than two years. I believe that it is a question first of transportation of material and of handling of material on the ground. To the best of my judgment and belief, they have a plant there which will handle this material with sufficient rapidity to complete that program. So that leaves, in my judgment, the only questionable points: First, those I have already mentioned, that of supplying the fabricated steel parts as fast as they are needed, and, second, that of getting the men trained over from their other occupations so that they can handle a caulking tool or pneumatic hammer or anything of that sort, and I believe, after watching the training in their industrial school, that there is no reason why they can not make a good shipsmith out of a country blacksmith who has been shoeing horses, by a very short period of training in that school or that they can not take a drill sharpener from some quarry, or a loom fixer, or even a jewelry mechanic and make a shipsmith out of him; in their industrial school, provided they could get housing arrangements so that a good class of men will be contented to stay there, when relieved from this disturbing turnover they have had up to the present time, it seems to me that the prospect is extremely bright of being able to carry out the program.

I think that the part of this whole program comprised in building the shipyard is substantially behind us; that they have the shipbuilding plant to-day there in readiness. When I was there a week or two ago they had in readiness the shipways where men to-day ought to be at work on more than 20 hulls, and I have no doubt they can take care of hulls faster than the material will arrive. So that I think the shipyard plant is at the present time a demonstrated success.

Then, the question comes as to the cost, or whether it might have been done for less cost. I think that has got to be weighed in the light of what I said this morning: What is your product worth to-day? How much to-day is it worth to have the fleet of ships ready one month earlier? On the basis of the ordinary charter rates of to-day that runs into a very large sum, so large a sum that it completely overshadows any possibilities that I can see for having cut down the cost, and so I believe that it was entirely a wise thing to rush ahead even at the chance of here and there making mistakes or doing something in a way that was a little more expensive than some slower way.

Senator VARDAMAN. Do you think, Mr. Freeman, that in order to accomplish that it is necessary to pay the enormous wages of some of the men, which you are doubtless aware have been paid?

Mr. FREEMAN. I am sorry; I believe it is. I was in contact with that question last week in some other work where I was proposing to have some work built in the city of Baltimore, and at these very large works, the Bartlett, Hayward Co., they told me of the enormous prices that skilled machinists are receiving.

Senator VARDAMAN. I am not talking about what they pay to the men who do the actual work. I am talking about the bosses.

Senator HARDING. He just covered those points a while ago, Senator, and it is already in the record.

Senator VARDAMAN. I beg your pardon. I did not know it was in the record.

Senator HARDING. I have no objection to its being repeated.

Mr. FREEMAN. I do not think that is to be looked at as salary. It is buying a block of experience, and the convenient way of paying for it is per diem, if it is a consulting engineer, or on a certain yearly salary if it is a designing engineer, or a certain monthly salary. You are buying not his labor in drawing lines on a sheet of paper or his sketching out the design. You are buying the accumulated experience of 20 years, and I think that is to be paid for on an entirely different basis from that of an engineer who simply executes a plan.

Senator VARDAMAN. If you have gone into that I will not take up the time of the committee by asking questions about it. I was in attendance on the Senate and am sorry I was not here when you went over it.

The CHAIRMAN. Did you make any study at all of the question whether, if you were going to start out now to build 120 ships, you would build those ships in the one yard of 50 ways, or whether you would divide that work and scatter those yards, say, some of them down in a milder climate in the South, 10 or 15 yards in one place, and on up the coast?

Mr. FREEMAN. That I think is very largely a question of the organization that you get to undertake the job. We have a way of saying in engineering works that some contractors are a "one steam-shovel man," that is, when you get a job beyond a certain magnitude a certain man can not handle it; it is too big for him. I think it is largely that way in this problem. I would say that you find yards along the coast where probably two shipways are all that the existing organization can handle. I think that this was an experiment, a step forward, and it was a matter of judgment. I doubt very much if you could have found a smaller organization than the American International Corporation that would have gone in

y such ambitious program. I do not know of another organiza-on in the world that has the means or that could call the men ogether who would undertake to do something so much larger han anything else that had ever been attempted and do it in so hort a time. I think in getting Mr. Vanderlip and Mr. Stone and Mr. Baldwin and their associates, and their calling in Mr. Connick here, who had been successful in getting the Panama-Pacific Exposition buildings together on time—I think that there was the basis for the hope of success in something that had never been tried before, and up to the present time they have demonstrated that they can deliver the goods.

The CHAIRMAN. That does not quite reach the question. Of course, if you are going to have one plant with 50 ways you would need a large organization, people of financial, engineering, and other skill and ability to carry it on. But the question comes back to whether or not, if the Emergency Fleet Corporation wanted to build 50 shipways, you would put them all into one plant or whether you would divide it up into three organizations.

Mr. FREEMAN. I used the illustration this morning of the Ford automobile plant. I think that same reason that has made that a success applies here to some extent. Take it in the case of these very high cost men: Their salaries are distributed over 50 shipways instead of over 1 shipway, that is, over the operations of 50. I think the modern method of the last 10 years, for example, is more and more toward these great mass organizations. You see it in the General Electric Co.; you see it in the Westinghouse Co., and you see it in some of the great concerns abroad. I think it has been true in Germany quite as much as here, in the great Siemens works and in the great chemical works of Beyer Co. and the Badische Co.: that is, the tendency of the times is toward concentration and working out these operations in close parallelism. I think as to this particular point—I went into it to some extent this morning—there are only a few cities along the coast of the United States that are well adapted for a rush program of this kind. I would say the only possibilities are Boston, New York, Philadelphia, and Baltimore, and when you get south of that you have no city where there are large machine shops and mechanical shops with populations of mechanics giving a sufficient reservoir to draw from to get men fro the local industries, and also get housing conditions quickly for th men that you attract by the stories of these high wages.

Answering Senator Vardaman—perhaps it is not a direct answ to his question, because he referred not to the high wages of m chanics, but to the high wages of engineers and superintendent I think these very stories that individual riveters on piecew at some of our shipyards along the coast have been earning as l as $20 a day helps attract men and will help solve this prol of the ships. When those men get from the West or from the country to these Atlantic shipyards they will find few men are st enough, husky enough, and of sufficient skill to put in rivets piece basis to count up to $20 a day, but there will be a good of them that will make $10 or $15 a day. These $10 a day men they get on a job, will find such adverse living conditions that many of them will want to go back home to the quiet c town where they have been blacksmiths, and would rather h

low wage there than these high wages at the shipbuilding plants. So I really think there is some necessity and justification for these high wages that are being paid all along the coast.

I desire to say that I did not want to altogether go on the ground of snap judgment on these points, and so I took pains to review some of my past data on the matter of organizing and beginning a great work of this kind in the ordinary way. I have been very intimately connected with the board of water supply in New York, and I had one of our assistant engineers get up from our records some diagrams showing the rate at which we got started on that work, and I might say that on that work, before the board of water supply had been formed, I had been on that work in a consulting capacity for the finance department and the water supply department for two years, and so knew pretty nearly what was wanted; and the general plan of campaign was all worked out before the present board of water supply was organized. It may be interesting to you to see how slow the progress was on a great work where the city was urgently in need of an additional water supply for comparison with the progress at Hog Island.

We were about a year getting our engineering organization up to the first peak and formulating our plans, and it was two years before we let the first large contract. When it came to expenditures, although contracts were let at the end of two years, the preliminary expenditures were very slow; the contractors were trying out their plant and getting things adjusted, and we really did not begin to spend money very fast until we had been on the work about three years. I will take one great individual contract, our first large contract, that of building the Ashokan Dam. It was nearly one year after that contract was awarded before the contractor really got under full swing; that is, he immediately began to collect an organization and got in a few steam shovels and cableways and preliminary work, but it took nearly a year to get everything under full swing.

I also reviewed some of the work I have been familiar with, as to the time that it took us to get fairly under way, and after comparison it is my judgment and belief that they accomplished as much in getting started at Hog Island in the first two months as is commonly accomplished in the first full summer season of work, and I find, in comparing these charts of progress, very curiously, that if you plot the chart for Hog Island on the scale for one month equaling a year of the work on the New York water supply, the two charts come pretty nearly together; that is, they did about as much at Hog Island in a month as is ordinarily accomplished in a year, I doubt if there has ever anywhere been as much accomplished, of such a variety of work, in so short a time as it was at Hog Island.

Senator VARDAMAN. And at an enormous price?

Mr. FREEMAN. The price has been high, but, Senator, when you figure that increase of price as a percentage of the final result: that is, if the earning capacity of your fleet is $9,000,000 a month, it seems to me that it is wise to risk, we will say, $1,000,000 on extra expense in speeding up the work.

Senator VARDAMAN. That, of course, is the only excuse for it, I apprehend.

Mr. FREEMAN. That, it seems to me, is the justification for it. I have been very much interested in this war program in getting things ready of various kinds, and I do feel that that is a justification.

I have here many other diagrams—I will not take your time up with them—but I have studied them and they form the basis for the opinion I have given. I have no doubt the company would give you copies of anything that you gentlemen want to put into the record. A chronological table that I have here is of particular interest in showing just when each important piece of the work was done; that is, how much had been done in one month and when they reached the two months' point and when they reached the three months' point——

Senator VARDAMAN. I think that has already been testified to.

Mr. FREEMAN. I had another type of a chart here. [At this point Mr. Freeman exhibited other charts to the committee.] The present-day plan on all large engineering works is to make out a progress chart, to lay out the work that you expect to accomplish, and draw a line showing the rate at which you really do accomplish it. I called for their original progress charts and then for their progress up to date down there, and I was interested in noting on various matters such as the grading and filling and putting in water pipes service and electric power and their street service, just how their program compared with their expectations. They were slowed up and they fell behind a good deal at certain points, but I note in that (indicating on chart) that in almost every one of these important constructions it was nearly two months after the contract was signed before the transportation facilities, the road, the highway, the railroad enabled them to get material on the ground and make a fair beginning. So that the actual accomplishment, as you see it to-day, is not so much the physical accomplishment of five months as it is what has been brought together and erected in three months.

Senator VARDAMAN. Mr. Freeman, when do you think they are going to float the first ship and have it ready for sea service?

Mr. FREEMAN. I think it all depends upon the speed with which the steel comes along. I think if you gentlemen can speed up the steel problem you will have solved the difficulty.

Senator VARDAMAN. We can not do anything about speeding that up; that is done by the Emergency Fleet Corporation, as I understand it. But you have no idea when they will have that first ship built?

Mr. FREEMAN. I see no reason why it should not follow their schedule very closely; that is, certainly the ways are ready to receive it, all of the tackle and apparatus is at hand to handle everything for the first few ships, and I am told that the derricks, the erecting towers, the cranes, are practically all of them on the railroad now centering toward Hog Island and will be erected within from one to three weeks, and I believe you can have—well, if you had the steel you could have 30 ships simultaneously in progress there in a very short time, and I see no reason why they should not go right on according to the program. As I have said before, I think the two obstacles are the delays in delivery of steel, the steel parts, and the scarcity of workmen.

Senator VARDAMAN. Do you know of any reason that steel should *not* be furnished? What is the cause of the delay on that?

Mr. FREEMAN. I do not know with certainty. I have a notion that it is a confusion of priorities that can be straightened out soon. I was assured by one of the most prominent steel men in the country as much as six months ago when the discussion as between steel ships and wooden ships as to type was up, and he gave me figures showing the small proportion of the steel production of the country that was required for shipbuilding and from the figures that he gave me at that time I would have no doubt that just as soon as you get transportation untangled and get this priority situation untangled——

Senator VARDAMAN. You mean the priority shipments or the priority of orders?

Mr. FREEMAN. The priority of orders. I know in respect of some material I am trying to get for work I am interested in there seems to be a confusion of priorities—that is, one man will get class A priority and will get in ahead of another man, and I have an idea, but not accurate information, that there is a good deal of confusion there that probably will be untangled in the next two weeks.

Senator VARDAMAN. There are no orders that take priority over the shipbuilding materials, are there?

Mr. FREEMAN. I think there have been. I have heard it so stated, with what accuracy I can not answer, that some of the fabricators of steel, hearing, or gathering from the newspaper stories about Hog Island, etc., that the shipyards were so far behind have been making other things instead of parts of ships. It is within your effort to find that out; that is merely a story I have heard.

Senator HARDING. Senator Vardaman, what you are asking for was placed in the record by the last witness.

The CHAIRMAN. Mr. Muhlfeld gave that the other day. Ships are fifth on the order of priority.

Mr. FREEMAN. I think, Mr. Chairman, you may be interested in some of these drawings to show the progress from month to month, which are the foundation of my faith that I have just expressed. For example, these [indicating on drawing] was the condition November 1, six weeks after the contract was signed. The red spots show what has been done on each particular part of the yard. This [indicating] is one month later, on December 1. You see, one of the subcontractors, Smare & Trieste, then began on their shipways and had seven of them about equally along. The Raymond Concrete Pile Co. had got a fair start on two.

And there is one thing I forgot to speak of in connection with having five different groups of contractors. I think that the putting a fireproof set of shipways right in the middle of the yard, virtually, was a very wise precaution, and that putting men in who made only concrete piles and concrete shipways drew also on another class of labor. So it was entirely independent of those who are using Georgia pine for piling.

The next month, February 1, it is of interest to see how things were getting along. Three of the contractors had made most excellent showing.

On March 1 you can see the progress that has been made in that month [indicating]. It is now almost April. If those diagrams were brought up to date you would see that there are more than 20 or 25 shipways that are to-day in shape to go right on with building

hull of the ship, and where everything can progress without any hindrance except the shortage of material and shortage of men.

That makes me feel that a successful completion of the shipbuilding plant is already a fact accomplished.

The CHAIRMAN. Do you hear any complaint of a shortage of men?

Mr. FREEMAN. No; except this turnover. This turnover I got figures on, and I gave them this morning. I think that is a very startling and disturbing situation all over the country, and I think probably that will be solved by providing better housing conditions, on which the Emergency Fleet Corporation or the Shipping Board are already at work. That has been true not only here, but true at Sparrows Point and true at the General Electric Co. at Erie, and true at a great number of industrial works.

Senator VARDAMAN. Mr. Freeman, how long would it take to provide those houses? That is a work of some magnitude, and it would take some months to accomplish it, would it not?

Mr. FREEMAN. I do not know. That question was asked me by the vice president of the General Electric Co., and I pointed to what was done at Camp Devens, and told him that it seemed to me that in their family houses they could follow the quickly built type of some of the better class of buildings that were built at Camp Devens; also the type of construction developed in some of your emergency buildings here in Washington, like those at Eighteenth Street and Virginia Avenue, but cut up into small units of two or four family houses; that you can get that type of construction and get some large organizations on it and build them just as quickly as the cantonments were built, or within 60 days.

Senator VARDAMAN. May I ask you this: Speaking about the work you did, about which you have testified, does that come under the head of the employment of experts by the Government in the employment of Stone & Webster?

Mr. FREEMAN. No; they are here simply as a sort of subcontractor, as I understand it. They have agreed to take charge of building this number of ships according to a certain program.

Senator VARDAMAN. The point I wish to know about is—it is a small matter, relatively, of course—but the bill that you are to render for your services, is that to be charged to the General Government?

Mr. FREEMAN. I have not the slightest idea. If I had not done so much work I should not have rendered any bill whatever.

Senator VARDAMAN. You do not know who will pay that?

Mr. FREEMAN. My best guess is that it would be the American International Corporation. That is where I think I should send it and let them find the account to charge it to.

Senator VARDAMAN. That is all, sir.

The CHAIRMAN. We are very much obliged, Mr. Freeman.

Mr. BALDWIN. Might I answer Senator Vardaman's question?

Senator VARDAMAN. I would be very glad to have you do so.

Mr. BALDWIN. The American International will pay whatever bills Mr. Freeman renders. Mr. Freeman was employed by the American International in the same way to look into matters critically for us so that I could be sure that our organization was functioning properly. He is the critic of our organization.

The CHAIRMAN. The committee will now hear Commander Taylor. Commander, state your full name and occupation.

STATEMENT OF COMMANDER STEVENSON TAYLOR, U. S. N., PRESIDENT AMERICAN BUREAU OF SHIPPING, NEW YORK, N. Y.

Commander TAYLOR. My name is Stevenson Taylor. I notice that it seems to be the proper thing to give a brief biography, and it is only fair to know the man who testifies before you, and therefore as briefly as possible I will give you my history.

I was born in the city of New York and was brought up practically on the water front and naturally interested in all things maritime. I went as apprentice with the then well-known firm of Fletcher, Harrison & Co., of the North River Iron Works, on West Street, New York City, and served as apprentice four years; went into the drawing room and became chief draftsman after a time, which position I held until 1883. In March, 1883, Mr. William Fletcher died. Mr. Harrison had sold his interest some little time before. Mr. Andrew Fletcher, the sole remaining partner, came to me and suggested to me that we would form an organization to be styled the W. A. Fletcher Co., provided I was interested enough in the business to go and join that company, taking a certain interest in the stock of the corporation. He very kindly offered to advance to me the money sufficient to buy the interest he proposed to let me have, to be paid for out of the earnings of the corporation. I did not take full advantage of his offer, but I took half of the money from Mr. Andrew Fletcher, who was and had been my chief for a number of years.

I was raised with that concern, and I am proud to say that at no time during my long service of 39 years and 9 months was anything done by that company that was not for the best interests of its customer, regardless of its own profits. So I was raised in a good school. In 1865 they took a contract to build a revenue cutter for the United States for the lake service. The hull was built in Cleveland by Mr. S. R. Kirby, the father of the well-known naval architect to-day, Frank E. Kirby, with whom I have been intimately acquainted from that date. Stephen R. Kirby was a genius, and it was from him that I began to learn at that time the principles of designing and building ships. A little later on I had a further advantage of the skill of Mr. George Pierce, one of the best shipbuilders in this country. So that my education in the lines of naval architecture and marine engineering came principally from these three men. In 1883, to go back to that point, when the corporation was formed I was made vice president and general superintendent, which position I held until I disposed of my interests in the W. A. Fletcher Co. in 1904, February 1. I had made up my mind that I would not continue in the manufacturing business at that time, and solely on my own account I disposed of my interests.

Almost immediately after that—indeed, that very month—I was engaged by the receiver of the United States Shipbuilding Co. to appraise all of the shipyards that they possessed. There were six of those yards, extending from Bath, Me., to San Francisco. On August 1, 1904, at the persuasion of a boyhood friend of mine, who was the owner of the Quintard Iron Works, I bought an interest in the Quintard Iron Works Co., formed at that time, and remained with them until 1914, when again I thought I had worked long enough at that sort of business.

The Fletcher Co. built a number of very large vessels, took contracts for them, supervised them, and I helped them with designs, starting as consulting engineer—Mr. Andrew Fletcher and myself—on the steamer *Pilgrim*, the first iron double-hull steamer built for Long Island Sound service—no, it was the second one; the *City of Worcester* had been built, but it was of single bottom, a different class of vessel.

The building of the *Pilgrim*, the building of the *Puritan*, the *Plymouth*, the *Priscilla*—all of which we had a great deal to do with, I was intimately connected with. While with the Quintard Iron Works Co. there were several vessels built, the princiapl ones being the *Massachusetts*, *Bunker Hill*, *Old Colony*, and finally the *Commonwealth*.

The CHAIRMAN. Were those passenger vessels?

Commander TAYLOR. Passenger and freight.

Senator HARDING. What we call "Sound steamers?"

Commander TAYLOR. What we call Sound steamers, the largest of the kind at that time in the country; indeed, there has only been one larger since built on the Lakes.

I have told you of my resigning and leaving the Quintard Iron Works Co.

In 1916, just two years ago, the 1st of March, at the solicitation of friends of mine, shipbuilders, underwriters, and shipowners, I undertook the reorganization of the American Bureau of Shipping, and I am still president of that institution.

So much for the business side of it. As for the other side, I was one of the original members of the Society of Naval Architects and Marine Engineers, which was incorporated in 1893. I was made immediately a member of the council and remained as such until I was elected president, succeeding Admiral Bowles as such in 1909. I served my term of three years, and as the president under our constitution could not be reelected, they elected another man in my place, who served for the following three years. Then, in 1912, they reelected me as president, and my term will expire on December 31 next. On March 28 and 29, last year, while in Chicago, on my way to the Pacific coast, I received a telegram from the Acting Secretary of the Navy, Mr. Roosevelt, saying he desired my services as a member of the Board of Appriasers of Merchant Ships and Naval Vessels for the United States Navy. I arrived home the next morning, got Mr. Roosevelt on the phone, and told him I would serve. He said, "We will make you a lieutenant commander in the United States Naval Reserve Force and give you a uniform." I told him that was not at all necessary; that I could do the work without the possession of a uniform. He said it would make the matter very much better. I said, "I am entirely in your hands, and will do as you please." On April 2 I was sworn in. On April 7 Mr. Donald, of the Shipping Board, came to my office and said that he wished me to serve as a member of the board of surveys and consulting engineer of the Shipping Board to take charge of the German interned steamers. I told him I had already taken this other position. He said, "I must have you on that board, too." I said, "Very well, I will do the best I can." On July 2 the President of the United States appointed the personnel of the first board of appraisal as a board to determine the just compensation to be paid to the owners of

vessels that had been commandeered by the United States Navy. I have served on these three boards up to the present time, and I am still a member of them, although I have tried to be relieved from one of them. At first, of course, it was a very arduous affair, more than anybody expected, but now it is very much easier, because the work to be done is considerably less, although there seems to be no end to it.

Such is my business and record of 34 years, sir.

The CHAIRMAN. Commander Taylor, did you examine this Hog Island plant? And if so, tell us about that.

Commander TAYLOR. Yes, sir. I will be glad to tell you all I know about it. It will not take me very long, although I think I know considerably about it, too.

As president of the American Bureau of Shipping, which institution is to class all of the vessels built at the Hog Island plant, at all the fabricating plants, indeed—Hog Island, Submarine Boat, and Merchants—it is my business to keep track of the ships built there as elsewhere. Mr. Baldwin, whom I have known for some little time, asked me if I would visit the plant and criticize it, and finally asked me, after I had been there, the questions that have been referred to by Mr. Freeman. When he spoke of that to me I thought it would be well to have still another man, and I asked Mr. Frank E. Kirby, the gentleman to whom I have referred before, to go down there with me.

I did that without consulting Mr. Baldwin, although after I got down there I told him what I had done, and he seem to be pleased. Mr. Kirby is a man that has been in this business just as long as I have. He, with his father, built the first permanent iron-ship building yard on the lakes, at Wyandotte, Mich., which afterwards became a part of the Detroit Shipbuilding Co., and after that a part of the American Shipbuilding Co., as it now exists. He has been consulting naval architect and marine engineer for a great many people. He has been the responsible designer and builder of over 200 vessels. I know of no man in the United States whose opinion I would value more than I would his on this very question that is before us.

We have conferred about this since we visited the plant, and have considered the plans. I carried a plan of it in my pocket for some time, occasionaly looking at it and studying it, and he has done the same.

And these answers that I will now give you to the questions that were submitted to us are not only my own opinion but the opinion of Mr. Kirby; we absolutely agree.

In the first place, the plan of the yard is well conceived for the production of the ships in the time mentioned.

Criticism made by us (not publicly expressed) before the contract was made was to the effect that 30, or at most 40, ways would have sufficed for the program. It is quite possible, however, that had we been sitting in council at that time we may then, on listening to the arguments, have been convinced that 50 ways was the proper number to be built, especially for the original program of 200 ships.

Our estimates now show the following result: One hundred and twenty ships can be built on 50 ways in less than nine and a half months' actual construction time; that is, from the time they commence laying the keels until they finish.

as the work proceeds.

Considering the unusual demand for labor, the breaki the railroad service in transportation and deliveries, and weather conditions—the worst weather known since offi have been made—the results obtained have been remarka extremely expensive.

The labor cost must have been doubled by the afore tions, even though those planning the yard considered other matters connected with the execution of the constr

We have no further suggestions to make—Mr. Baldw his memorandum of questions for suggestions as to any the conduct of the work—we have no suggestions, furt quit the discussions and to take up the work with the sp pleting the program in the shortest possible time; and we parties to the contract will undoubtedly do this.

Gentlemen, our opinion is simply this: Great results co efforts of men of foresight, energy, and ability. If such added to broad vision and willingness to undertake some before contemplated, the whole project makes a strong a familiar with this sort of work; and we have confiden work undertaken will be accomplished within the time

We have gone over that matter, and we have determin laying of keels to the completion of type A ships will tak from the laying of keels to the completion of type B ships days; that from the laying of keels to the launching of t will take 70 days; and from the laying of keels to the l type B ships will take 80 days.

Now, that brings us to the time I have stated. The ya under construction six months. There are almost 16 mon ing, which gives the total of 22 months which is allotted

[illegible]

[illegible]

[illegible]

where the work can be done in 20 or 30 or 40 different places throughout the United States—can we build the ships? To me that was a tremendous thing to undertake; I hesitated, of course, before I answered that question. But I finally said to them, "You can build the ships, I believe; with the organizations that are under your control; with the ability that the men in the corporation have; and with the energy that you can put into it, you can build the ships." And I have not changed my mind as to that.

I visited that place; and to anybody who does not know about construction, it would look as though it were a tangled mass, never to be untangled. But I know better; it will be untangled; the ways will be ready before the steel will be there. As has been testified by Mr. Freeman, they are ready to-day with 12 of them, and the steel is not there.

Nevertheless, I do not care even about that point. The steel will be there because finally this committee will see the need of getting the steel there and will use its influence to that end, because the ship is the first thing required in this war.

Secretary Daniels, at our last meeting of the Society of Naval Architects and Marine Engineers, at which I invited him to deliver an address, said that very thing. You can talk about all these other things, but ships will win the war. And I want to emphasize that particular point—ships will win the war.

The CHAIRMAN. I think nearly everybody is agreed as to that now.

Commander TAYLOR. Well, I feel that very strongly. I know I am telling you trite facts.

The CHAIRMAN. That is very important; you can not put it too strongly.

Commander TAYLOR. It is the most important thing in the minds of everybody who has anything to do with this proposition.

The CHAIRMAN. Would your society, the American Bureau of Shipping, class the ships?

Commander TAYLOR. Yes, we are classing the ships. We have gone over plan after plan. Ordinarily, a classification society, like the English Lloyds and our own, would take a cross section of a ship, a longitudinal plan, and perhaps examine some of the decks, and would pass some three or four plans. Now we are furnished with hundreds of plans on these very ships; they have gone into it very minutely; it has added very much to the cost of our work in the classification society.

The CHAIRMAN. You think that the ships will give satisfaction, do you?

Commander TAYLOR. Absolutely; I have not the slightest doubt of it.

The CHAIRMAN. As to the site of the plant, you found it low and marshy, did you not?

Commander TAYLOR. There is no trouble about that. I believe that is the best place you could have found; I do not know of any better place.

There is another consideration, Mr. Chairman: The men who first discussed this matter with the American International Corporation, Gen. Goethals, and afterwards Admiral Capps, both men that I know—and I am as sure as I am that I sit here that they never in the world would have made a contract with these people of any kind

whatsoever if they had not had faith in the full performance of the contract. I know them both very well.

Senator VARDAMAN. You have no doubt about the fulfillment of the contract?

Commander TAYLOR. No, sir; provided the steel is furnished, I believe they will get the men, sir.

Senator VARDAMAN. I do not think there is any doubt about getting the men. I agree with you about the necessity of building the ships; I agree with you that nothing should be permitted to interfere with the construction of ships; that the matter of cost should not interfere with the construction. The only thing in which I am interested in that connection is that the money shall go into the ships. And you really have faith, have you, in the fulfillment of the contract and you think that they are going to be able to build them?

Commander TAYLOR. Well, Senator, do you think I would sit here for one minute and say what I have if I did not think so?

Senator VARDAMAN. I hardly think you would.

Commander TAYLOR. Not for one minute, no, sir.

Senator VARDAMAN. I hardly think you would. And I hope sincerely that your judgment about it may be correct; we all hope that.

Commander TAYLOR. I tell you, sir, give the people a chance; give them what belongs to them. If they do not produce the ships, come down on them quickly and hard.

Senator VARDAMAN. Well, of course, nobody wants to do that.

Commander TAYLOR. Anything that I can add for the information of the committee I will be glad to furnish.

Senator VARDAMAN. I have no further questions.

Commander TAYLOR. May I take the liberty of referring now to the American Bureau of Shipping, Mr. Chairman?

The CHAIRMAN. Yes.

Commander TAYLOR. I should like to refer to that, in view of the fact that it has been mentioned in one of your earlier hearings. I notice in the testimony that something was read out of some book that purported to give the objects of the American Bureau of Shipping. I wish to substitute for that what really are the objects of that bureau, as set forth in our constitution and by-laws. I would like to have Article I incorporated in the record, Mr. Chairman.

The CHAIRMAN. Article I of the constitution and by-laws of the American Bureau of Shipping may be inserted in the record.

(The article referred to is here printed in full, as follows:)

ARTICLE I.—THE OBJECTS OF THE BUREAU.

The objects of the bureau are as shown by the charter, and for the purpose of carrying out these objects the bureau is to provide for shipbuilders, underwriters, shippers, and all interested in maritime commerce a faithful and accurate classification and registry of merchantile shipping and to aid and develop the merchant marine of the United States of America.

Commander TAYLOR. There is just one thing more I want to say, Mr. Chairman, I am not in the employ of the American International Corporation.

Senator VARDAMAN. You stated that you had no interest in it.

Commander TAYLOR. Did I?

Senator VARDAMAN. Yes.

Commander TAYLOR. Well, it just occurred to me, and I thought I ought to tell you that.

Senator VARDAMAN. If you had not said so, we would have asked you.

Commander TAYLOR. All right; then that is all.

The CHAIRMAN. We are much obliged to you, Commander Taylor.

Mr. Baldwin, we will now hear your next witness. Who is it?

Mr. BALDWIN. Mr. James French, who is the chief surveyor in the United States of the English Lloyds; he occupies the same position in the English shipping that Commander Taylor does in the American shipping.

The CHAIRMAN. Mr. French, we will hear you now

STATEMENT OF MR. JAMES FRENCH, CHIEF SURVEYOR, FOR THE UNITED STATES AND CANADA, LLOYDS REGISTER OF SHIPPING.

Mr. FRENCH. I was born in Newcastle upon Tyne, England, in 1867. I was apprenticed to H. S. Edwards & Sons, of Newcastle, in the office and shipyard, for six years. One year following that, I was in the office of Swann & Hunter and Wiggin Richardson, Newcastle. The following six years I was assistant manager of Wallsend Slipway & Engineering Co., at Wallsend upon Tyne, England.

In 1894, I joined Lloyds Register of Shipping as a surveyor. The first three years I was in the Newcastle district. The following 14 years I was in the Clyde district, Scotland; and during two of those years I was principal surveyor for the society in Scotland.

Eight years ago I was transferred to America, for the purpose of approving plans of vessels to be built in America for the Classification in Lloyds Register. Two years ago, they appointed me chief surveyor for America and Canada, to continue such work and to look after the whole staff on this continent. That has been my experience up to the present time.

The CHAIRMAN. Have you examined the Hog Island yard and plant, and the designs of the ships being built there?

Mr. FRENCH. Yes. In January of this year I made my first visit to Hog Island. It was then in a state of chaos. There were no keels on the blocks, but the yard was in the course of construction.

A month later I again visited the Hog Island plant to see what progress had been made, and to my astonishment there had been a great transformation from what had been a swamp to a place where the construction of the shipyard had been well pushed forward.

It was on that occasion that I met Mr. Lovekin, who is now director of fabrication. I discussed the matter with him; he asked me for my opinion of the whole project. I said to him, "My idea of that yard is that it is merely an assembling plant, because all parts, or within 1 per cent of all parts, of the ship will be fabricated in different places throughout the country and brought to Hog Island to be assembled."

I also told him that I considered that the yard was well conceived to carry out the program which had been intrusted to the American International Corporation. I also said that I did not consider that any number less than 50 of ways would be sufficient to complete the program in 22 months; in fact, it was absolutely necessary, in my opinion, to have that number of ways.

He then asked me [illegible]
could have [illegible]
perience [illegible]
type of vessel [illegible]
been that [illegible]
vessels [illegible]
At the [illegible]
will be [illegible]
from the [illegible]
I was [illegible]
[illegible]
[illegible]
[

The CHAIRMAN. They are going in for building the fabricated ships, are they?

Mr. FRENCH. Yes; they are going in for that now.

Senator VARDAMAN. You think there is no doubt, do you, about that system of building ships proving a success?

Mr. FRENCH. Oh, there is no doubt about that; the system that I have seen is perfect.

Senator VARDAMAN. You have seen this shipyard at the request of Mr. Baldwin and have examined it?

Mr. FRENCH. No, sir; I went there in the course of my official duties.

Senator VARDAMAN. But you overlooked it all?

Mr. FRENCH. I overlooked it all; I did not know Mr. Baldwin until afterwards.

Senator VARDAMAN. You approved the plan of the yard?

Mr. FRENCH. I approved the plan of the yard, and also the type of boat.

Senator VARDAMAN. Then, in the Plowman's phrase, "God send them speed in building ships."

The CHAIRMAN. How have you found transportation facilities since you were there the first time? Have they improved?

Mr. FRENCH. Yes, sir; improved from what they were the first time I went there. On my fourth visit there they were using up materials as fast as they came in. I am sorry to say that they are very slow in coming in. The first ship ought to have been half finished now.

The CHAIRMAN. Has there been any delay on account of not getting the material?

Mr. FRENCH. Yes, sir. If they do not get the material, the shipbuilder should not be blamed; but if they get the material, I do not think there is any question whatever but what the program will be carried out on time.

The CHAIRMAN. Thank you very much for your statement, Mr. French.

(Thereupon, at 5 o'clock p. m., the committee adjourned to meet at 10.30 o'clock a. m. Thursday, March 28, 1918.)

The CHAIRMAN. Mr. Lisle wrote me a letter that he would like to present some data and facts on the subject of motor boats. He states he is familiar with what is being done in Europe and this country, and I told him the committee would hear him.

STATEMENT OF MR. THOMAS ORCHARD LISLE, EDITOR OF MOTORSHIP, SOUTH FERRY BUILDING, NEW YORK CITY.

The CHAIRMAN. State your name and place of residence and occupation.

Mr. LISLE. My name is Thomas Orchard Lisle, editor of Motorship, South Ferry Building, New York.

The CHAIRMAN. Motorship is a publication issued how often?

Mr. LISLE. It is issued monthly and has been published for two years. Do you wish a copy?

The CHAIRMAN. You might show the committee a copy.

(Mr. Lisle thereupon exhibited to the committee a copy of Motorship.)

The CHAIRMAN. Mr. Lisle, what has been your business heretofore?

Mr. LISLE. I have been seven years engaged as a practical engineer, and since then I have been somewhat engaged as a consulting engineer and technical journalist; about 15 years' experience along those lines altogether.

The CHAIRMAN. Where have you lived during that time?

Mr. LISLE. Four years in the United States and the rest of the time in England.

The CHAIRMAN. Do you know about the development of the motorship?

Mr. LISLE. It is a thing I have watched right from the earliest days, from the very first vessel.

The CHAIRMAN. What do you desire to submit to the committee?

Mr. LISLE. What would you like to hear first, Senator, the advantages of motorships at the present time or what they are doing abroad?

The CHAIRMAN. Just make your statement in your own way. Perhaps the advantages might be given first, but in which ever order you desire.

Mr. LISLE. Perhaps I would just as well give the importance of it first.

The importance of motorships may be grasped from the following. Just before the war in Europe the American Hawaiian Steamship Co. were considering converting their oil-fired steamers to Diesel motor power; but the demand for bottoms suddenly arose and time to lay up the ships could not be spared.

But had these ships been converted their fleet to-day would be carry at least 20,000 tons additional cargo every voyage and the cost of [illegible]ation would be [illegible]

also be added that [illegible]

each would every voyage [illegible]

cargo [illegible]

[illegible]

[illegible]

the ships cost more for the size of the ship. Absence c
charges in the port; greatly increased cruising radius; le
bunkering; elimination of unruly firemen worries; redu
room staff, because stokers are dispensed with. The rev
the propeller are constant and are not dependent upon th
energies of the stokers. You probably know that with
fired ship with the slacking of the firemen the steam pre
down and the speed of the boat drops. But it is a purely
proposition with a motor ship and does not depend on any

Senator NELSON. State that again.

Mr. LISLE. With the motor ship the amount of fuel pun
engine and burned is a purely mechanical proposition, m
the time with a pump which is regular. But on your stea
have firemen stoking coal, unless it is an oil-fired ship, w
times work well and sometimes do not, and if they do no
the steam pressure drops and the speed of the ship drops.

With motor ships the propellers rarely race in heavy w
cause of the pressure in the cylinders. When the propeller
of the water the engines do not race because the governor
fuel instantly and stops them from racing.

There is better propulsive efficiency when the ship is
There is smaller wage and food bills. The ship is alway
instant starting. You have not got to get steam up 12 h
or anything like that. Very rapid maneuvering is possibl
ahead to full astern in five seconds, with a 5,000-ton
waste exhaust gases can be used for economically ope
auxiliaries; dispensation of steam piping on deck when
auxiliaries are used, and better all the year around prop
ciency.

There is another thing I would like to mention, and th

And also no new sailing ships should be laid down without some arrangements for auxiliary power. All along the coast of Maine they are building quite a number of sailing ships which have no motors.

Another thing is, every ship, whether steam or motor, sailing to the war zone should have an emergency motor-driven electric lighting set on deck, which is independent of the main boilers, so that if the ship is torpedoed at night and the boilers put out of action, the crew have got electric lights to see in the launching of the boats. All these foreign battleships and some lines have such installations, including the White Star Line boats and the Holland-American Line passenger boats.

Senator NELSON. These motors are only used, my understanding is, on smaller ships, so far?

Mr. LISLE. That is a great mistake a lot of people have got into believing. I have here a few examples of some of the ships which have been built abroad: boats ranging up to 15,000 tons have been built [exhibiting photographs to the committee].

Senator NELSON. Do you have the same kind of turbines as you do for the others?

Mr. LISLE. No turbines are used. The Diesel engine is a power unit in itself. It requires no boilers.

Senator NELSON. No, but I mean, you have a propeller, do you not?

Mr. LISLE. Yes: the engine is direct-coupled to the propeller shaft.

Senator NELSON. I used the word "turbine," but I mean that you need a propeller for these ships as you do for the steam ships?

Mr. LISLE. Oh, yes. A Diesel engine resembles very much an ordinary reciprocating engine with double the number of cylinders.

Senator VARDAMAN. Does it run with gas?

Mr. LISLE. They use crude oil, practically the same as is used under oil-fired boilers. You can use heavier oils, but if you use very dirty oil it gives the engineers more trouble, and they will naturally say the engine will not use crude oil, as they want to use cleaner oil. If you use the dirty oil you ought to pay your engineers a little more for the extra work required in doing that, and since you have no stokers you can pay the engineers the extra money and then they take proper interest in their work.

I want to give a few details about what is going on abroad. Lloyd's Register shows nearly 500 Diesel vessels.

I received a letter last week from the secretary of Counsellor of State Anderson, of Denmark, who is the head of the East Asiatic Co., and he says his company has entirely abandoned steamships in favor of Diesel motor ships, and that they have in service 15 motor ships aggregating 120,000 tons dead-weight capacity, and that they have contracted with Burmeister & Wain for another 250,000 tons dead-weight capacity of Diesel motor ships of up to 14,000 tons dead-weight capacity each.

Senator VARDAMAN. Will you explain to me that Diesel ship? I was not listening to you very closely. What special advantages are there in the motor ship?

Mr. LISLE. The main thing is that it carries 10 to 12 per cent additional cargo more than a steamship can carry.

Senator VARDAMAN. Why is that?

Mr. LISLE. Because the consumption of oil fuel weight for weight is one-third of the amount a steamer requires, due to the greater thermal efficiency of the Diesel engine. You see, the Diesel engine has about 38 per cent thermal efficiency, compared with about 20 per cent for a steam engine. That means to say, instead of carrying, we will say, 1,000 tons of coal in the bunkers of the big ship, you would only carry about 300 or 400 tons, and you would use that extra space for cargo. Then, there are no boilers.

Senator VARDAMAN. How do you generate power from this oil?

Mr. LISLE. You would spray it into a cylinder containing highly compressed red-hot air, and it ignites that fuel, which burns and expands, and as it expands it forces down the piston and turns the crank shaft. You save the boiler space, or most of it, because the engine is a little longer, and then you save all the water in the boilers and the water you have to carry for the boilers.

Senator VARDAMAN. Do you not have to carry water when the Diesel engine is used?

Mr. LISLE. No; only drinking water for the crew.

Senator VARDAMAN. You do not have to use any water?

Mr. LISLE. Sea water is used for cooling, which is pumped in from the side of the ship, but a ship has to carry about 150 tons of fresh water purely for the boiler when steam engines are used, even though they have condensers on board.

Senator VARDAMAN. What is the difference in the cost between this machinery and the other?

Mr. LISLE. This machinery costs about 10 per cent extra, but the main thing is that you are able to carry more cargo on a motor ship. So when you consider the amount of cargo space saved and the cost per ton of cargo, the cost is a little less.

Senator VARDAMAN. Is that Diesel engine altogether as reliable as the ordinary steam engine?

Mr. LISLE. Quite as reliable to-day. Good engines are being worked in a way that steam has never done—that is, they are making 40 or 50 or 60 days nonstop runs, which is practically unknown with the steamship. There are, of course, a lot of people who have built the Diesel engine who have had no right to build that engine; who did not regard it seriously and went ahead and made a failure of it. Ships were put in service and gave bad results and created bad impressions upon people who saw them. But many firms abroad have developed these high-power engines and they have had very high service from them, and all those builders are ready to supply our shipbuilders with drawings.

The CHAIRMAN. Is not that the danger? You might order Diesel engines and they might turn out all right and they might not?

Mr. LISLE. The expert who orders can see he has a good job. He can go to Lloyd's and get the records of every ship in the service and what she has done.

Senator VARDAMAN. How many ships of the type you speak of are now in the service?

Mr. LISLE. That is, just about one firm I was speaking of?

Senator VARDAMAN. I mean this character of ship.

Mr. LISLE. In Lloyd's Register, vessels from about 100 tons to 15,000 tons show nearly 500, and then there are a large number, for instance, over 100 in Russia, which are not on the records.

As I was saying, the East Asiatic Co. have contracted with Burmeister & Wain for another quarter million tons of Diesel motor ships up to 14,000 tons dead-weight capacity each. They intimate that they have absolute faith in motor ships as a result of their six years' practical experience. Here, I might say, they took three steamships and installed Diesel motors in them. The rest of their steamships they sold during the war. Burmeister & Wain, the ship builders, of Copenhagen, Denmark, have entirely abandoned steamship construction, and now are building motor ships exclusively, and their orders for the North Star Line and for the East Asiatic Co. have booked their entire capacity for eight years ahead. There is not a steamship builder in the country who has orders for eight years ahead. I have a statement of their chief engineer in my grip.

Senator NELSON. I notice the biggest ships of this type are Danish. I guess over half of the lot in your album are Danish.

Mr. LISLE. Quite a lot of Danish and Dutch and [illegible]

Senator NELSON. Swedish and Dutch and some [illegible] and British, but I think over half are Danish.

Mr. LISLE. A considerable portion are Da[illegible] the Danish ministry of commerce [illegible] of 2,500 tons dead-weight capacity [illegible] be completed within 18 months [illegible] the necessary materials.

Holland, although [illegible] terials during [illegible] 20,423 tons gross [illegible] represented a [illegible] namely, [illegible]

The Wes[illegible] 1918, [illegible] motor [illegible] tons [illegible]

Senator [illegible] ship as well [illegible]

Mr. [illegible] has a [illegible] mentioned [illegible] first [illegible]

Senator [illegible] a steam [illegible]

Mr. [illegible] not [illegible] [illegible]

[illegible] tons [illegible]

Mr. [illegible] Line [illegible]

[illegible]

Mr. [illegible] not [illegible] engine [illegible] interest [illegible] be [illegible] those [illegible]

and the German Government never could build Diesel engines properly.

Senator VARDAMAN. Are we using Diesel engines in our submarines?

Mr. LISLE. Yes; and if they were not sufficiently reliable they could not carry out the present campaign. There are a large number of submarines all over the world, and they have never had any difficulty in finding men to operate those submarines, and yet the submarine engine is quite a complicated affair compared with merchant ship engines. They have the problems of higher speed.

Among the Diesel engines for motorships which Werkspoor now have building may be mentioned two of 9,700 tons, one of about 7,000 tons; and one of 4,050 tons for Otto Thorensen, the Norwegian shipowner of Christiania; also a 9,700-ton motorship for Winge & Co., of Christiania, and one of 9,700 tons for the Ada Steamship Co.

It has been thought and stated by officials of the Shipping Board Corporation, I believe, that Diesel engine ships would delay the United States shipbuilding program. This company in Holland designed, built, and ran trials of their first motor vessel in six months, and this was the first ocean-going Diesel ship ever built. Up to the end of last year she has run 210,000 miles. She was a vessel of 2,080 tons displacement, and now is in the Far East.

Sulzer Bros. of Winterthur, Switzerland, have been chiefly building naval type Diesel engines, but also have supplied some high-powered motors for tankships to the British admiralty, and other mercantile type motors. But, since they first commenced marine Diesel engine building, they and their foreign licensees have completed a total of 165,250 brake horsepower of merchantship type and submarine type motors and 238,070 brake horsepower of stationary type motors.

Now, altogether, that amounts to one-half million engine horsepower in marine and stationary Diesel engines, or equivalent to driving 161 ships each of 10,000 tons displacement dead-weight capacity and of 12-knot speed. Therefore, there must be operators for those engines, even for land service.

Three of the principal merchant motorship builders of Italy are the Fiat-San Giorgio, Ansaldo & Co., and the Savoia Shipyard, all of which are controlled by Ansaldos, who have a capital of 100,000,000 lires. The Italian "emergency fleet" includes many motor vessels, and the Fiat-San Giordio will launch not less than 18 standardized merchant Diesel motor ships of 8,000 to 10,000 tons dead-weight capacity each year, and, partly for this purpose 8,000 skilled workmen now are being withdrawn from the army, making a total of 18,000 to 20,000 men.

They have taken a big advertisement in our paper showing what they are doing in this country. They have already completed merchant-marine and submarine type Diesel engines to the extent of 90,000 brake horsepower, or sufficient propelling power to [illegible] freighters each of 10,000 tons capacity and of 12 knots [illegible] cently they launched two Diesel tankships for [illegible] department.

At Andaldo's yard at Sestri Ponente [illegible] Diesel and steam-driven cargo ships [illegible] pacity are under construction an[illegible] 6,000 tons dead-weight capa[illegible]

ships are building. Ansaldo's, by the way, have a Sulzer license which they recently purchased.

It is reported that three Diesel-driven motor ships recently were launched at the Ercenzo Bacini [illegible] I have not got any data of that, only just the report.

The firm of Franco Tosi, of Genoa, recently [illegible] three Diesel tankships for the Italian Navy, and have started work on two more. They have been building naval craft but will now build Diesel-driven merchant vessels. Franco Tosi [illegible] great strides in the construction of motor ships, as they have done with high-powered submarines. Incidentally it may be mentioned that the Italian Government gives a subsidy of $[illegible] per horsepower to owners of sailing ships who install motors in their craft to encourage them to go ahead.

In addition to the two [illegible] on order with Franco Tosi [illegible] another 500 b. h. p. [illegible] Diesel engines, and two [illegible] Cantiere Navali di Castellammare [illegible] for the Demetrio Vatti of Genoa, [illegible] Dufour of Genoa, and two [illegible] of Sestri Ponente.

Recently the Japanese Government [illegible] tional license from Sulzer Bros. of Switzerland [illegible] engines up to 2,400 horsepower each, and it is [illegible] their intention to place a fleet of motor-cargo ships in the Pacific Ocean, in which case it will be almost impossible for American steamships to compete with the Japanese in the Pacific Ocean under normal conditions; that is to say, [illegible] if we run steamships, will be wiped off [illegible] the business at a loss.

The CHAIRMAN. What would be the size of these ships?

Mr. LISLE. The size of these ships would be [illegible] to 15,000 tons.

I have got a letter from the Sulzer Bros. saying that the Japanese Government paid them a very large sum of money for those drawings.

The CHAIRMAN. How about the speed of these Diesel-engine ships?

Mr. LISLE. I should say it would be about 12 knots, 11 or 12 knots.

The CHAIRMAN. Can you get them faster?

Mr. LISLE. They can be constructed with a speed up to 15 knots, but you do not want freighters with that speed. I do not think there is any use of building 15-knot cargo ships. They will not carry so much cargo and they can not run away from submarines anyhow. The big German submarines they have out now develop 20-knot speed. I have a photograph of one right here [exhibiting photograph to the committee].

[illegible] about Japan, several Japanese shipyards also have [illegible] Diesel engine rights including the Kawaski

[illegible]ic does not concern America much.
[illegible]has about 50 Diesel-driven tank
each, many large passenger
, and a dozen 1,000 brake

horsepower Diesel gunboats in service. Here it may be mentioned that at Petrograd there is a splendidly equipped Diesel engine works where numbers of high-powered submarine and gunboat Diesel engines have been built. If Germany obtains control of this plant and of the Reval shipyard, it means at least another 50 big U-boats a year for Germany on the Atlantic.

About five months ago I foresaw this, and suggested to Secretary Daniels of the Navy that endeavors should at once be made to remove all the machinery from this great Diesel plant, to prevent the Germans obtaining control, but have not heard if it was possible to do this. If Germany obtains control of the Kolomna Diesel Works, Soromow Diesel Works, and the Nicolaieff Shipyard, we also can expect renewed submarine activity in the Mediterranean next winter.

The thing is, will they get control of those yards? I do not know. You are familiar with the real situation in Russia. I am sure I am not.

The CHAIRMAN. Would there be any trouble getting fuel if we adopted that type for future construction?

Mr. LISLE. None whatever. The United States is the greatest oil country in the world, and we should use that oil to drive our ships. The crude oil is found in all parts of the United States, especially California and down in Texas. But the point is, you see, if you build oil-firing steamers, they use three times the amount of fuel when burning oil under the boilers instead of coal. If coal, it is five times the amount.

The largest merchant vessel ever built in Sweden, the *Bullaren*, is a Diesel driven motorship. She is the first of three sister cargo ships of 9,100 tons capacity and of 4,000 indicated horsepower building for the Transatlantic Co., at the yard of the Gothenburg Shipbuilding Co. Her Burmeister & Wain motors were built under license.

Another Swedish Diesel engine company, namely, the A. B. Diesels Atlas Motorer of Stockholm, have a fully paid capital of five and one-half million dollars. They have engined dozens of coastwise vessels and two ocean-going motor ships, one of which, the *Hamlet*, a 10,000-ton vessel, regularly calls at Philadelphia.

Norwegian shipowners are building many motor ships and auxilia ries. In fact they have been responsible for most of the moderate sized motor ships and auxiliaries lately built in the United State You know we have had a number of those that have been built the United States, and most of those orders were placed by the Nc wegians. The Akers shipyard have a Burmeister & Wain Die license, and are building big motor vessels for trans-Atlantic servi

The largest vessel ever built in Norway was a motor ship, a freigh of 6,500 tons dead-weight capacity, recently launched at the Al yard for Fred Olsen, who has several more under order.

France has not very many. Before the war only a few l motor ships had been completed, one of which was an unusual c being a high-powered auxiliary steel sailing vessel of 10,500 tons placement, which has been very successful. Apparently they been devoting their attention to naval work since the war.

The Spanish Government about a year ago encouraged dor concerns to build marine Diesel engines by intimating that would give large orders to concerns which would buy Eur licenses. The Spanish Engineering & Metal Co., of Madri

[illegible]

[illegible] shipyard [illegible] 1,500 [illegible] had [illegible]

The [illegible] hand for [illegible] shipyards [illegible] [illegible] Boston [illegible]

The [illegible] Switzerland?

Mr. [illegible] from Holland [illegible]

The [illegible]

Mr. [illegible] their own [illegible]

Senator [illegible]

Mr. [illegible]

Senator [illegible]

Mr. [illegible] and [illegible]

[illegible] and [illegible]

Senator [illegible]

Mr. [illegible] many [illegible] and [illegible]

William [illegible] country [illegible]

Will [illegible] and [illegible] be [illegible] war [illegible]

[illegible] which [illegible] engine [illegible] dozen [illegible]

For [illegible] capacity [illegible] Harlan & Wolff [illegible] the same [illegible] ships. Lord [illegible] controller of British shipbuilding [illegible] before long we shall see many [illegible] in Great Britain, because, judging by [illegible] shown himself to be a believer in the motor ship.

Senator VARDAMAN. Have you discussed this matter with the Emergency Fleet Corporation?

Mr. LISLE. I have taken the matter up with them a number of times, and made suggestions that they adopt a standard form of Diesel motor ship.

Senator VARDAMAN. Have they done nothing about it?

Mr. LISLE. They have done nothing whatever. Theodore Ferris was very strong against them; he did not believe in them; he did not know anything about them; he had not made proper studies. And they relied on him in the past as an expert; and I think they have been so busy since then, and have had so many troubles, that they preferred to go ahead on lines that they knew about.

The CHAIRMAN. Your suggestion, as I understand, is not to interfere with the present program of the Shipping Board or Fleet Corporation in any way, but that in future construction the motor ship should be considered?

Mr. LISLE. Yes, sir; take the matter up right away. There are people in the country building these engines now. One big plant in Milwaukee, Wis., has been building a number of those Diesel engines, of quite a large size, 1,200 horsepower; and all of their experience in building engines of that kind has been wasted, because they have now been given an order by the Emergency Fleet Corporation for 15 marine steam engines of 1,400 horsepower. That is a wicked shame to waste their experience and equipment in that way.

I have a telegram here from the publishers of our paper, Motorship, in Seattle, which says:

> Dr. Luckie of Columbia University was here last week, and he thinks it criminal that American oil engine factories should be working at building steam engines for the Government.

I understand that a number of these firms have approached the Shipping Board for orders, but they have not been able to get any.

The CHAIRMAN. Are there many firms equipped to build Diesel engines in this country?

Mr. LISLE. Quite a number; but they have not developed any large sizes, except one concern, and that is for stationary engines. But there is no reason why they can not go ahead and expand their works. You might say that there were no concrete shipyards; but you are going ahead and building concrete ships.

The CHAIRMAN. This motor power—the Diesel engine—can be installed in almost any ship, can it?

Mr. LISLE. Yes, sir; in almost any ship. It is a wonderful thing, and we ought not to ignore it.

The CHAIRMAN. Do you think they could be built to any extent in this country?

Mr. LISLE. Without any doubt; because you can get all the exper assistance you want from abroad; they will send men here, and wi furnish all their drawings.

The CHAIRMAN. And then men will have to be provided to opera

... operate them can be provided while

Most of these are [illegible] with [illegible]
In fact, practically all concrete [illegible]
propelled.

Senator WADSWORTH. [illegible]
you have to the [illegible]

Mr. LISLE. I will [illegible]

Senator WADSWORTH. [illegible]
have to work it.

Mr. LISLE. [illegible]
types of the domestic [illegible]
eating is a wonder [illegible]

The CHAIRMAN. [illegible]

Mr. LISLE. [illegible]
there are [illegible]
others.

Senator WADSWORTH. [illegible]
who understands [illegible]

Mr. LISLE. [illegible]
man. [illegible]
myself.

This [illegible]
engine [illegible] as [illegible]
higher—been [illegible]
a line [illegible]
their [illegible]

The CHAIRMAN. [illegible]

Mr. LISLE. [illegible]

The CHAIRMAN. [illegible]

[illegible]
all of the [illegible]

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

WEDNESDAY, APRIL 3, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to call, at 2.30 o'clock p. m., Hon. Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Sheppard, Vardaman, Shields, Nelson, Jones, Sherman, Harding, Fernald, and Calder.

The CHAIRMAN. Mr. Baldwin, the committee is ready to hear you now.

ADDITIONAL STATEMENT OF MR. GEORGE J. BALDWIN, SENIOR VICE PRESIDENT AMERICAN INTERNATIONAL CORPORATION AND CHAIRMAN OF THE BOARD, AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION, PHILADELPHIA, PA.

Mr. BALDWIN. I will occupy but a few moments of the committee's time, Mr. Chairman.

First, I should like to present to the committee a list of the names of the 3,200 stockholders of the American International Corporation, showing all the transfers that have taken place since the date mentioned by Senator Johnson in asking for this list. I have forgotten just what that date is, but all the information is in these lists [indicating]. I should like to file this list with the committee.

The CHAIRMAN. Does the committee desire to have the list printed in the record?

Senator HARDING. Just what does it contain?

Mr. BALDWIN. It is a list of the 3,200 stockholders of the American International Corporation, showing the number of shares owned by each, and the transfers that have taken place.

Senator HARDING. I think it will be sufficient if the list is filed, Mr. Chairman. I do not care, of course; but I do not see the necessity of inserting it in the printed record.

The CHAIRMAN. The list will be filed; and if it is determined by the committee later to have it printed in the record, that can be done.

Mr. BALDWIN. I would like next to present a statement from Mr. Frederick W. Wood, of Baltimore, Md. Mr. Wood is a man 61 years of age; he graduated from the Massachusetts Institute of Technology in Boston in 1877. He has been continuously engaged in the manufacture of steel and in shipbuilding for 40 years, retiring from executive duties in January, 1918. From 1887 to 1889 he had direct

charge of the designing and construction of the steel works and shipbuilding plant at Sparrows Point, Md., continuing as president and general manager of the plant until his retirement. Mr. Wood has stated in a memorandum to me that the best freight ships built in this country have been produced at the Sparrows Point plant during the last 10 years and at the lowest cost. I think he is correct in that statement.

Mr. Wood was a classmate of mine, and I wanted an unbiased expert examination made of the work we were doing. I asked Mr. Wood to take certain questions and go down and make a report for me as to whether we were conducting that work properly, from his point of view as an outside shipbuilder, or not. And he made this short report to me, which I should like to have permission to read to the committee, if I may.

The CHAIRMAN. Certainly; you may read it.

Mr. BALDWIN (reading):

BALTIMORE, MD., *April 9, 1918.*

Mr. GEORGE J. BALDWIN,
Chairman American International Shipbuilding Corporation,
Philadelphia, Pa.

DEAR SIR: As requested by you, I have gone over the preparations made by your company for building 120 fabricated ships for the Emergency Fleet Corporation and submit the following summary of my observations:

Before examining critically the plant at Hog Island I visited your engineering offices at Camden, where I was given full information regarding the plans of the ships, the time allowed for their construction, and other details which were the basis for the extent and arrangement of the shipbuilding facilities to be provided.

The Hog Island yard has been well planned and built for the rapid and efficient construction of ships from material which has been prepared elsewhere for assembly.

In my judgment, you require for your building program the entire 50 shipways, all of which should be completed as rapidly as possible.

To construct the yard by stages of 10 ways, as at one time proposed, would inevitably result in serious delay and increased cost of ships.

The track system for reception of freight and the storage and handling of shipbuilding materials is well laid out with a view to the prompt release of railroad cars and to insure prompt delivery of steel and machinery alongside the ways and on the fitting-out piers.

The construction of the yard to its present stage in little more than five months from the date work was begun would have been a most notable achievement under very favorable circumstances. With the weather conditions that have prevailed during the past winter, difficulties arising from demoralized rail transportation and scarcity of labor, the work accomplished is evidence of the great technical and executive ability and efficiency of your organization.

The yard is now in condition to permit the shipbuilding to proceed on schedule time, and at the present rapid rate of progress the last ways will be finished before they are required.

Considering your undertaking as a whole, the system of ship construction has been carefully worked out by competent engineers and naval architects to meet present emergency conditions, and you have provided all necessary plant facilities for carrying out your building program to meet your contract obligations.

The outcome in my judgment is now wholly a question of the proper delivery of materials to your plant and assembling and maintaining an adequate labor force.

Yours, truly,

F. W. WOOD.

That is the opinion of a man who understands the shipbuilding business thoroughly, and who has no connection with us in any way—and he is not paid for it either; it is his voluntary opinion.

Mr. Chairman, there are several questions which do not seem to be yet clear to the committee, in spite of our testimony; and in order that they may be definitely cleared up, I have put them in the form of a

written statement, of four or five pages, which I should like to have the opportunity of reading to the committee, if I may.

The CHAIRMAN. All right; you may proceed.

Mr. BALDWIN (reading):

After having carefully gone over all of the testimony that has been given to your honorable committee with reference to the Hog Island situation, I find that it does not make clear and full certain particulars of the contract in question, which I desire now to do, and ask that this letter be made a part of the record in this investigation.

When the original negotiations were being carried on by and between the representatives of the American International Corporation and the Shipping Board, it was always understood that, if any contract was made with us for the building of the ships in question, the Government was to have for the fee paid the services of the organizations of not only the American International Corporation but of the firm of Stone & Webster and New York Shipbuilding Corporation. Instead of the fact that some of the officers of American International Corporation were allied with and connected with Stone & Webster and the New York Shipbuilding Corporation being a detriment to the Government, it was considered by the officials of the Shipping Board to be to its benefit, so that, when the contract was in fact entered into by and between the Shipping Board of the one part and American International Corporation of the other part, it was understood by the parties thereto that, although the contract was made only with American International Corporation, in spirit and in intent it was made with all of the above-named organizations, to wit, American International Corporation, New York Shipbuilding Corporation, and Stone & Webster.

Now, after this contract was entered into, it was found necessary by the respective organizations above named to have some specifically named vehicle to carry out this contract and, therefore, American International Corporation caused to be incorporated under the laws of Delaware a corporation which is now known as the American International Shipbuilding Corporation, with a nominal capital stock of $2,000, all of which stock is owned by American International Corporation. After the American International Shipbuilding Corporation was organized and chartered, contracts were thereupon entered into by and between American International Corporation, Stone & Webster, New York Shipbuilding Corporation, and American International Shipbuilding Corporation, whereby this one fee, which the Government was to pay for the building of these boats, should be divided in certain proportions between American International Corporation, Stone & Webster, and New York Shipbuilding Corporation. The organization or corporation known as the American International Shipbuilding Corporation receives no part of this fee whatsoever, so that in spirit and in intent the contract in question is one of the United States Shipping Board, upon the one part, and the American International Corporation, Stone & Webster, and New York Shipbuilding Corporation, doing business under the name and style of American International Shipbuilding Corporation, of the other part; so that the contract, when understood, is a simple one so far as these respective organizations are concerned.

Under the terms of the contract in question, the Government receives the services of the executive managements of the firm of Stone & Webster, of American Internationl Corporation and of New York Shipbuilding Corporation, without paying any of its salaries, office expenses, or anything of that kind or character, all of this being paid by these respective organizations, and, as a matter of fact, the Government is not paying nor has it on its pay roll the salaries of the chairman of the board of American International Shipbuilding Corporation, or of the vice chairman and managing director of the American International Shipbuilding Corporation, or of any of its vice presidents, to wit, myself, Mr. F. Holbrook, Mr. D. P. Robinson, Mr. H. D. H. Connick, Mr. G. O. Muhlfeld, and Mr. H. L. Rogers, all of whom have been actively engaged in this work.

Under the contract, all of the purchases which are being made or have been made for materials are made either by the officials of the Shipping Board or are approved by them before any purchases are made, and none of these purchases are made from any allied interests of this agent. Now, when it is understood that there are some 3,000 stockholders of American International Corporation, it can be taken for granted that some of these stockholders are interested in some companies or concerns from which purchases are being made, but all purchases are made in the open market by competitive bidding, there being in no case less than three competitive bids.

I want to add furthermore that the contract in question, as well as the subcontracts, that have been entered into are in the usual form of contracts for construction work that have been used by Stone & Webster since the time of the existence of this organization, and such as are in common use in ordinary commercial contracts throughout the United States and have always been, excepting that in the present instance

original contract between the Shipping Board and the agent, and the subcontracts between the agent representing the Shipping Board and the subcontractors, are more favorable to the Government than the ordinary forms of contracts are to the owners in ordinary construction work.

I want to add furthermore that all of these contracts in question can be justified from every standpoint by the testimony of any fair and competent constructor who has carried on business operations in this country, and no advantage has been taken of the Shipping Board or the Government in making these contracts, because they have all had the approval of the officials of the Shipping Board. The original contract in question was practically prepared in its entirety by Admiral Capps and by the attorney or attorneys of the Shipping Board. The reputation for ability, caution, skill, and great care of Admiral Capps is well known, and it can not be said that he would have permitted the United States Shipping Board, acting for the Government, to have entered into a contract that was not a reasonable one for the Government to have entered into.

It must be further borne in mind that under the terms of the contract no fee or compensation of any kind or character is paid to the agent for the preparation of the yard in question. The only fee that is paid is one of so much per boat, so that it can not be said that there was an intentionally low estimate made as to what the yard would cost and, since that time, an extravagant expenditure of public moneys so as to increase any commission to be paid to the agent. It must be further understood that no fee or compensation is paid by the Government for the construction of the yard in question except the small fee that is paid to the subcontractors, and this fee is based upon what the agent estimated the work in question would cost, so that it can not be said that the subcontractors are interested in a large expenditure of money in carrying out their contracts, because they only receive a fee upon the estimated amount that was made originally and not upon the amount of money that is spent in fact.

It must be further understood by the committee that the amount of money that has been paid in wages in its entirety in this transaction up to date is only something in excess of $7,000,000. All other moneys that have been spent have been paid out for materials furnished, and these materials, as above stated, have all been purchased by the Shipping Board itself, or with its approval.

It must be clearly borne in mind by this honorable committee that we are not a contractor in this matter. It is not a contract whereby we have agreed for a certain sum to do the work in question. No such relationship exists between the Government and ourselves. We are simply employed as an agent of the Shipping Board to do this work for the Government. We are a part of the Government—an arm of it—and not a contractor, and, therefore, being an arm of this Government, we are entitled to have this committee fully understand that we are carrying out properly what we are employed by the Shipping Board as its agent to do, and, occupying that relationship toward this Government, if there are any doubts in the minds of any of the Senators of this honorable committee as to the integrity or reasonableness of this so-called contract in any particular, we are entitled to have the Senators express such doubt and to be permitted to clear up any question that has not been cleared up in the minds of the Senators, because we can easily do so.

What we contend in this matter is—

(*a*) That the scheme in its entirety was the only proper and practical way in which the Government could speedily have its ships.

(*b*) That the contract in its entirety was an honest and a reasonable one, not burdensome upon the Government, and in the light of past events a contract which we ourselves would have made for the Government had we been representing it.

(*c*) That from a commercial standpoint we would not undertake to perform the services and do the work which we are doing in this matter for the fee which we are to receive. We probably should require twice as much.

(*d*) The transaction in question is a simple one between the Government of the one part and the agent of the other part, the agent comprising all the various corporations above named, and that there is no interlocking of directorates of various corporations mixed up in profiteering at the expense of the Government.

(*e*) That there has been no delay in the program and that the work has been faithfully, honestly, speedily, and efficiently carried out, and that the United States Government will soon have a completed and efficient yard and the best organization of men in the world for the quick and effective production of ships in hitherto undreamed of quantity.

(*f*) That the agent who was employed to do this work was the most competent and the best equipped organization of any existing in the world.

(*g*) That the location, or the site, was the only one that could have been selected, made with the joint approval of the agent and the Shipping Board, that the purchase

price paid was paid by the agent, and whether high or low the Government could not possibly suffer therefrom.

(h) That no purchases are being made by the agent from any affiliated corporations, so that the charge of profiteering can not be made in that direction.

(i) That the contract in question is not one between the Government as the owner and ourselves as a contractor, but one wherein the relationship between the Government and ourselves is that of principal and agent, we having simply been employed as the agent of the Shipping Board to carry out for the Government certain of its work, and that in performing these services we are in fact a portion of the Shipping Board and an arm of the Government.

(j) That while we do not intend to take up the time of the committee in having any more witnesses testify, still at the same time, if the committee is not satisfied in any particular, we would be glad if they would say so to the end that we can procure testimony of the proper witnesses to enlighten the committee, because we are an arm of the Government, portion of it, composed of loyal American citizens who can not afford to have their loyalty questioned, nor their integrity, nor their business capacity, nor can we afford to have the people feel that as American citizens we have imposed a contract on the Government, and we are satisfied that the more we have this investigated, the more witnesses that are subpœnaed, the more it will be seen by this committee and the public that there has been and is no wrongdoing, and that there has been and is nothing to criticize.

All of which is respectfully submitted.

There are one or two other things that I can say to the committee in a few moments' time.

We hope that the committee will arrive at its conclusions promptly, because there is nothing that retards the performance of the work or is so dampening to its efficiency than for the organization to have to do its work under suspicion of any kind or sort; and if the committee feels that we are doing that work honestly, faithfully, and efficiently, and as well as any other organization can do it, we should like to have them say so; and we should like to have them say so just as soon as they can possibly do so, because we believe it will add to the effectiveness of the organization and will produce the ships quicker than if we do not have that; because it will enable us to keep up the spirit of our men, and to hold them together; and when you are trying to speed up any work, if you have not got the right spirit you can not quite make the speed.

Then, there is one more thing that is of vital importance: I do not believe the War Industries Board, nor the Priorities Board, nor the Shipping Board have realized the speed with which that yard has been built. I do not think anybody has realized the speed with which it has gone forward. And I think they did not realize, when we put in our orders for steel, that we meant business, and that we ought to have the steel when we said we ought to have it. And they have not sent the steel to us.

Senator JONES. Does that mean that your work is being delayed now for lack of steel?

Mr. BALDWIN. That means that our work is being delayed to-day for lack of steel.

Senator JONES. How long has that condition existed?

Mr. BALDWIN. We have now 20 ways in the yard where we ought to have been laying keels.

Senator JONES. Since when?

Mr. BALDWIN. We have had them there for the last two weeks.

Senator JONES. You have been ready to lay keels on all of those?

Mr. BALDWIN. Yes, sir; we have been ready to lay keels on them since two weeks ago.

Senator JONES. Has that situation been brought to the attention of Mr. Piez and Mr. Hurley?

Mr. BALDWIN. It has been brought to their attention; it is being brought to their attention daily.

Senator HARDING. What is the cause of the delay?

Mr. BALDWIN. I will tell you in one moment. We are to-day just about 50,000 tons of steel behind in our schedule. We ought to have a bank of steel in that yard that we can draw from. You can not take steel right from a railroad train as it comes in and put it into your vessel; you must have all the different parts of the vessel there that you can draw from. That takes quite a reservoir of steel—a good many thousands of tons.

Senator JONES. How about those fabricating yards that you were going to get your fabricated steel from? Are they behind in their deliveries of steel?

Mr. BALDWIN. The statement that was made to us was this: All the fabricating men were called to Philadelphia about two weeks ago, and they corroborated what had been shown by our own investigations in this matter. We have our own men constantly going all around to see how we stand in connection with getting this material. The fabricating steel men said to us on that occasion, "We can not get the steel to fabricate," and we know that statement to be true. They have not the steel to fabricate.

Senator NELSON. Do you mean by that that they have not secured the raw material?

Mr. BALDWIN. They have not secured the raw material; it has not come to them from the steel mills.

Senator HARDING. Is that due to delays in production or delays in transportation?

Mr. BALDWIN. The steel men tell us—and I think that is true—that on the 1st of July the plate capacity of this country will be 6,000,000 tons per annum, or at that rate; it is gradually approaching that now.

About half of that would necessarily be required for cars, tin plate, and all the various uses of plate. The other half could be available for ships. That is, 3,000,000 tons. That 3,000,000 tons would build 12,000,000 tons of ships. So that the capacity of the rolling mills is there. The rolling mills claim—and I think this is true—that they have not been getting the steel from the steel producers in some cases. In some cases they are the same company, and in other cases they are different companies. The trouble there seems to be that they have not been getting the coke for use in their furnaces, and therefore they have had to close down, and therefore they could not, until about now, begin to ship the steel to the rolling mills and from the rolling mills to the fabricators.

Then, when they have shipped the steel from the original steel mill, the transportation to the rolling mill is slow. Sometimes, when it is not the same plant, the transportation from the rolling mill to the fabricator is slow; and, while I can not give the exact figures, there is something like twenty times as much steel started as we have got in the yard, most of which ought to be in the yard to-day, but which has been delayed all along the route.

Senator NELSON. It is in transit, then, is it?

Mr. BALDWIN. Yes, sir.

Senator NELSON. I think I can see the situation you describe: You have to go to this Priorities Board; and then you have to go to the board that furnishes the material; and then to another board. I call the attention of the committee to this as an evidence of the necessity for the passage of the Overman bill.

Mr. BALDWIN. I will say just a few more words on this subject, if I may. I do not think it is the fault of any one of these organizations. I think it all comes right back to that one statement, that there ought to be some one authority. If I give an order in my company, it is obeyed; there is no question of anybody else interfering; that stuff goes through as I order it; and if it does not, I know whom to blame, and whom to put my finger on. But if I had a dozen men giving orders, it would be very different; nothing would be done.

Senator JONES. It comes right down to the proposition that the President can issue such orders as may be necessary to have these things done; there is the great central authority.

Mr. BALDWIN. We are ready to use up steel at that yard at a rate that I do not believe anybody realizes. We want 60,000 tons a month in that plant, for the next three months.

Senator JONES. Does not Admiral Bowles realize that?

Mr. BALDWIN. I think Admiral Bowles does realize it.

Senator JONES. Is he urging it?

Mr. BALDWIN. Yes, sir; I think he is urging it.

The CHAIRMAN. And you say the steel is not coming in now?

Mr. BALDWIN. The best promise we can get so far is that we shall probably be able to receive what we ordered for this month, but not be permitted to catch up at all.

The CHAIRMAN. And you are really behind in receiving it?

Mr. BALDWIN. Yes, sir; and we shall still be as far behind at the end of the month as we are now.

Senator RANSDELL. Are you more in advance in your deliveries of steel than other shipyards, so far as you know?

Mr. BALDWIN. I think some of the yards are short of steel, and I think quite a number of them have a fair average quantity; some of the older yards, which are building naval vessels—for instance, the New York Shipbuilding yard—are not as bad off as other yards, because that yard, for instance, is building destroyers for the Navy, and they have priority on that account. That may be entirely proper for the naval vessels to have priority over the merchant vessels; I do not know as to that; but we should have the steel.

Senator RANSDELL. Would you say that, as a general proposition, the yards that are building merchant vessels are in better shape than the Hog Island plant, with regard to the delivery of steel, so far as you know?

Mr. BALDWIN. My personal impression is that we are a little worse off than the most of them, because I think the people who are shipping the steel have never realized that we are going to use so much of it; they have said, "Those fellows have bitten off more than they can chew, and we will ship them half of what they ask for; that is all that they can use."

Senator RANSDELL. Do you understand that those other commercial shipyards are short in their steel deliveries, even if they are not as much so as you are?

Mr. BALDWIN. I think the Submarine Boat Corporation is behind, and I think most of the steel yards are somewhat behind: some of them are not behind at all: some of them seem to have obtained a very good supply.

The CHAIRMAN. So far as you know, Admiral Bowles and the Shipping Board have had that matter up with various people who are supposed to control it, have they——

Mr. BALDWIN. Yes, sir.

The CHAIRMAN (continuing). Urging them to get the steel?

Mr. BALDWIN. I have not any complaint of what has been done by any of those gentlemen: I think they are all working at it, and all trying to do it. It goes back to that one central difficulty, of having no central authority to issue the orders.

Senator JONES. You are up against the same difficulty that we are all up against now in trying to get anything done.

Mr. BALDWIN. Yes, sir.

Senator JONES. We simply go around in circles.

Mr. BALDWIN. I do not know of anything, except, as Senator Jones suggested, an order from the President that ship material must move.

Senator NELSON. Well, even if he issued such an order, it would be necessary to have somebody to see that the order was executed?

Mr. BALDWIN. We will put the men on: I am going to use some of those very high salaried men, to whom reference has been made here, and put them on the job; they are on it now.

The CHAIRMAN. You spoke about some of the representatives of the executive management of the American International Co. and the New York Shipbuilding Co., and Stone & Webster, giving their attention to this work at Hog Island?

Mr. BALDWIN. Yes, sir.

The CHAIRMAN. What representatives have you there of the executive management of those companies now?

Mr. BALDWIN. At Hog Island?

The CHAIRMAN. Yes.

Mr. BALDWIN. For the past two months I have spent practically all my time there that I have not spent in Washington. I say "practically"; I have spent there all of my time that I have not spent here. Mr. Connick has spent all of his time; Mr. Stone has spent, for the last month, all of his time. Those are three. Then, among the other men, we have a dozen or two of them that have been down there spending from one-half to three-quarters of their time there; men like Maj. Case, and Mr. Streater, and all of our other officers. With the Stone & Webster organization, it has been practically the same thing.

The CHAIRMAN. With the exception of lack of material, have things been going in a satisfactory manner?

Mr. BALDWIN. I think everything to-day is absolutely satisfactory, except the failure of steel to arrive in the yard. The yard is fully ready for business, and has been for two or three weeks.

Senator HARDING. Mr. Chairman, I want to make a motion relating to this very subject.

The CHAIRMAN. All right.

Senator HARDING. I move that the chairman of this committee be instructed to invite the attendance of the chairman of the United

[illegible] trying for [illegible] months to get the wage question down there set-
d. and [illegible] there is a chance to have men as it will be the same
the e[illegible] of all [illegible] as it is now
Senator HARDING. [illegible] that you are having
ficulties in [illegible] wage standards down there.
Mr. FRANCE. [illegible] the war things have been working.
e sent a telegram to Mr. Mason telling him that it was absolutely
cessary for a delegation from the shipyards at the west [illegible]
[illegible] and settle the
wanna[illegible]
age matter [illegible] They have repeatedly
sured us that the same would come to a head by a certain date and
hen that date came [illegible] Mr. Mason finally conceded,
e importance of the conference and we came up here and have been
ere for a week and [illegible] matter. There are men
And [illegible] in the South from the interior
going down [illegible] shipyards in the South going up and down the country
These [illegible] are [illegible] in the shipyards. They are
and telling the men [illegible] from $7 to $8 a day and the men
big wages [illegible] that the wages are $6, $6.50
go down [illegible]
or $4 a day [illegible]
Senator HARDING. What classes of men in the shipyards in the South
get only $4 or $4.50 a day?
Mr. FRANCE. Practically all of them.
Senator HARDING. Do you mean skilled men?
Mr. FRANCE. Yes sir. The biggest shipyard in our town paid an
average of $2.10 a day for one week.
The CHAIRMAN. For ordinary labor?
Mr. FRANCE. For all classes put together.
Senator JONES. Taking them all together and averaging them all?
Mr. FRANCE. Yes sir. They have 1,100 employees; and I got
from the paymaster one week his total pay roll for that week, and
I figured it out and it amounted to $2.08 a day per man.
Senator RANSDELL. What do the skilled mechanics get in that
section of the country—the carpenters, for instance?
Mr. FRANCE. Fifty cents an hour; that is the extreme limit of the
skilled mechanic. In Texas, I believe they have come up to 62½ cents
an hour. At Milton, Fla., up to a very short time ago, the men
have been compelled to work for from $2.35 to $2.65 a day.
So that it was absolutely necessary for us to get this wage proposition through, and we have been here in Washington for a week with the representatives of the Shipping Board trying with might and main to get the wages in those yards standardized.
The CHAIRMAN. There is no plant at Milton, Fla., building ships for the Fleet Corporation, is there?
Mr. BEDSOLE. They have been building submarines, Mr. Chairman. The Pensacola Marine Construction Co. have been building them, and the workmen have to lie under palmetto trees at night.
Senator HARDING. Well, Senator Sheppard has injected this point into the testimony. The trend of the testimony before the committee heretofore has been to the effect that we ought to encourage shipbuilding on the Gulf coast, because there was no question of having to build houses for the workers down there.

States Shipping Board and the chief executive officer of the Emergency Fleet Corporation, and that they call upon the President of the United States and ask his assistance and cooperation in meeting this great emergency that exists for shipbuilding material.

Senator JONES. I second the motion.

(The motion was unanimously adopted.)

Mr. BALDWIN. If the steel flows, gentlemen, we promise you the ships when we agreed to have them.

Senator RANSDELL. How many ships have you got under way now, Mr. Baldwin?

Mr. BALDWIN. Things go so rapidly there that I have not been able to follow that up; they had five the other day when I was down there.

The CHAIRMAN. If there are no further questions that is all, Mr Baldwin.

Senator SHEPPARD. Mr. Chairman, there is a committee representing workers in the shipyards of the Gulf coast who want to be heard in regard to the housing situation, and the urgent need for housing facilities in the shipyards on that coast.

Senator HARDING. We have already appropriated $50,000,000 for that purpose.

Senator SHEPPARD. But they want to impress on the committee what course the aid so extended should take. They represent every shipyard on the Gulf coast, from Florida to Texas; and I think the committee ought to hear them.

The CHAIRMAN. All right; we will hear the gentlemen now.

STATEMENT OF MR. C. H. FRANCK, OF PASCAGOULA, MISS.

Please give your name and residence, and state whom you represent.

Mr. FRANCK. My name is C. H. Franck. I am from Pascagoula, Miss. I represent the shipyard employees. We have been up here for the past week on invitation of the wage-adjustment board, to remedy various matters, and to expedite work on the ships, which has been delayed by wage questions.

But there is one other great difficulty, and that is the housing proposition. You will notice in to-day's newspapers that the South is away behind, according to Mr. Hurley's figures on the production of ships. At different ports in the South the shipbuilding industry is a new one, and the housing facilities have not been anywhere near sufficient to take care of the men that have been called to those ports. We, of course, did not know the wording of this law appropriating money for housing; if we had known it, possibly we would not have come up here.

But in my opinion, it is going to take a little more than merely an order of the Fleet Corporation to provide those houses. Our experience here in Washington the past week has proven to us conclusively that there is too much latitude permitted in the orders of the Fleet Corporation; they say one thing, and the men out on the job do what they please. And while it may be perfectly correct to say that this money has been appropriated to build the houses for the workers in shipyards, if you do not get behind the Fleet Corporation and insist on this housing program being carried out, the housing program will be in the same condition one year from now as it is to-day. We have

been trying for six months to get the wage question down there settled, and unless there is a change in their methods, it will be the same at the end of another six months as it is now.

Senator HARDING. You do not mean, do you, that you are having difficulties in getting your wages standardized down there?

Mr. FRANCK. I will tell you the way things have been working. We sent a telegram to Mr. Macey, telling him that it was absolutely necessary for a delegation from the shipyards, all the way from Savannah, Ga., to Beaumont, Tex., to come up here and settle the wage matter, or it would result in a tie-up. They have repeatedly assured us that the thing would come to a head by a certain date, and when that date came nothing was done. Mr. Macey finally conceded the importance of this conference, and we came up here and have been here for a week, and nothing has yet been done.

And this housing proposition is a vital matter. There are men going down there to those shipyards in the South from the interior. These "four-minute" speakers are going up and down the country and telling the people, "You are needed in the shipyards; there are big wages to be made there; from $5 to $7 a day;" and then the men go down to the shipyards and they find that the wages are $3, $3.50, or $4 a day.

Senator HARDING. What class of men in the shipyards in the South get only $3 or $3.50 a day?

Mr. FRANCK. Practically all of them.

Senator HARDING. Do you mean skilled men?

Mr. FRANCK. Yes, sir; the biggest shipyard in our town paid an average of $2.10 a day for one week.

The CHAIRMAN. For ordinary labor?

Mr. FRANCK. For all classes put together.

Senator JONES. Taking them all together, and averaging them all?

Mr. FRANCK. Yes, sir. They have 1,100 employees; and I got from the paymaster one week his total pay roll for that week, and I figured it out, and it amounted to $2.08 a day per man.

Senator RANSDELL. What do the skilled mechanics get in that section of the country—the carpenters, for instance?

Mr. FRANCK. Fifty cents an hour; that is the extreme limit of the skilled mechanic. In Texas, I believe they have come up to 62½ cents an hour. At Milton, Fla., up to a very short time ago, the men have been compelled to work for from $2.35 to $2.65 a day.

So that it was absolutely necessary for us to get this wage proposition through, and we have been here in Washington for a week with the representatives of the Shipping Board trying with might and main to get the wages in those yards standardized.

The CHAIRMAN. There is no plant at Milton, Fla., building ships for the Fleet Corporation, is there?

Mr. BEDSOLE. They have been building submarines, Mr. Chairman. The Pensacola Marine Construction Co. have been building them, and the workmen have to lie under palmetto trees at night.

Senator HARDING. Well, Senator Sheppard has injected this point into the testimony. The trend of the testimony before the committee heretofore has been to the effect that we ought to encourage shipbuilding on the Gulf coast, because there was no question of having to build houses for the workers down there.

Mr. FRANCK. If you will come down to Pascagoula, Miss., I will show you a condition that is absolutely disgraceful. I will show you 10 or 12 men housed in a room not over 9 by 12 feet, and they have been there for months. I came from the interior there to the coast to work in the shipyard, and I have been trying for four months to get housing accommodations. It is costing me $17.50 a week to board my one daughter and myself, and we are living in one room. We can not get a house in that town for love or money.

Senator HARDING. Are you a carpenter?

Mr. FRANCK. Yes, sir.

Senator HARDING. What are they paying carpenters in the southern shipyards?

Mr. FRANCK. The highest price is 50 cents an hour.

Senator HARDING. What is the standard wage along the northern coast—62½ cents an hour?

Mr. FRANCK. No, sir; Savannah, Ga., is getting 62½ cents; it was 55 cents up to a short time ago; now they get 62½ cents there.

Senator HARDING. Is there any particular reason why a Mississippi carpenter should work for less than the average rate paid carpenters elsewhere?

Mr. FRANCK. No, sir. We have been trying to have the wage adjustment board look at it in this way, that it costs just as much to drive a rivet in a board on the Gulf coast and the Atlantic coast as it does on the Pacific coast, and unless the wages are standardized you are not going to keep labor satisfied, because laboring men will go to the place where they get the highest wages.

Senator FERNALD. I am very much surprised at your testimony. You say that the average wages in the shipyard where they employ 1,100 men are $2.08 a day?

Mr. FRANCK. Yes, sir.

Senator FERNALD. And that includes the skilled labor—all kinds of labor?

Mr. FRANCK. Yes, sir.

Senator FERNALD. What do your lowest priced men get?

Mr. FRANCK. $1.75 a day for eight hours, or about 21 cents an hour.

Senator FERNALD. No such testimony as that has been presented to this committee before.

Senator HARDING. Is that for the negro—common labor?

Mr. FRANCK. No, sir; that is for the white men; the white men and the negroes get practically the same; we do not draw any color line in wages.

Senator FERNALD. What yard is that that you were speaking of?

Mr. FRANCK. The International Shipbuilding Co. That is the squarest yard in that part of the country.

Senator RANSDELL. That is at Pascagoula, Miss., is it?

Mr. FRANCK. Yes, sir.

Senator HARDING. You have not had any trouble in securing a hearing from the wage-adjustment board, have you?

Mr. FRANCK. Not at this time; I am thankful to say that we have had every door open to us now—even including Mr. Piez's. The facts have now become known as to why the construction of ships has not been expedited. Men would go to the shipyards and work for a week or 10 days; and they would find no places for their families, and they would go back home. The wage question is a vital thing.

There is no use sending men to the shipyards, when the men who have been there come back and say that the stories of high wages paid there are all lies; that they do not pay over $4 a day, and that they are charging from $7 to $9 a week for board. When a man gets back home and goes into his union meeting and tells his personal experiences, the result is that the men will not go to the yards to work. You have not been employing the class of men who are essential to build those boats; and the statements of these men who have been there, whether they are union men or not, being personal testimony, will go much further than the promises of some unknown man on a platform.

In another six months we are going to suffer the penalty for not treating the shipyard workers right, because the boats will be needed, and we will need the men to build our ships, and will not be able to get them.

Senator HARDING. If those are the wages that have been paid, you need not testify further as to that; you have been treated very badly as to wages, and I do not believe there is a member of the committee that does not think you ought to have your wages standardized. Now, let me ask you this question: What kind of houses do you want built down there for the workers?

Mr. FRANCK. In the interest of getting a better class of employees, we would recommend this: Four weeks ago I had a talk with Mr. Flannery, of the Shipping Board housing committee, on this point; and he seemed to think that some sort of a cantonment proposition for taking care of the worker himself would be the best. I told him, "No; there are a lot of young fellows going down there, men who will work for only a week or 10 days and then quit; unattached young men. And the class of men that are needed down there the most are the house carpenters. These young fellows do not know anything about the work; they only stay there a short time, and they are actually a hindrance in the construction of a boat. We want to have a type of houses that a man can buy on monthly payments and have his family live in; then he will not be so apt to quit if the foreman gives him a few cross words; he has got his family to look after.

Senator HARDING. How much will such a house cost down there?

Mr. FRANCK. $700 for the house and lot.

Senator HARDING. You can get a house and lot for $700?

Mr. FRANCK. Yes, sir. The International Shipbuilding Co. is building four and five room cottages down there; and the superintendent of construction told me that the average cost was about $650.

Senator HARDING. How soon could they be built?

Mr. FRANCK. They are building about forty a week. Here is another point to be considered: That International Co. did not expect to have to go into the housebuilding business; they are using men that ought to be working on the ways back there in the woods building houses.

Senator RANSDELL. That is a frame cottage, is it, to which you refer?

Mr. FRANCK. A frame cottage; yes, sir.

Senator RANSDELL. And about how much grounds would there be for each house?

Mr. FRANCK. A lot 50 feet by 80 feet.

Senator RANSDELL. That allows a little ground where they can put in a small garden, does it?

Mr. FRANCK. Yes, sir.

The CHAIRMAN. And the lot does not cost much?

Mr. FRANCK. Well, the company has purchased a great big site there, and they are using that site to take care of the employees.

The CHAIRMAN. How far is it from the plant?

Mr. FRANCK. Twenty rods outside of the fence.

Senator FERNALD. How fast could they build those $700 houses?

Mr. FRANCK. If they could get good crews working on them, they could build 50 or more a week, because they could standardize the construction, and you could put one bunch of framers at work, and another bunch of erectors at the same time, and so on.

Senator HARDING. About what is the population of that town?

Mr. FRANCK. Pascagoula has between 5,500 and 6,000 people.

Senator RANSDELL. How much is the monthly rental for those houses after they are completed?

Mr. FRANCK. The International Co. is charging the men from $15 to $17.

Senator HARDING. That ought to appeal to the real estate men as a good business proposition.

Mr. FRANCK. Oh, you can not get the local men there to handle it; that town is owned by about four men; and they have not spent any money on it. I challenged one of them the other day to show me where $5,000 had been spent in the town since this shipbuilding work began toward erecting the housing necessary for the shipyard workers, and he could not do it. The first question those people ask is, "Well, how much will we make if we build the houses? How much will the Government give us?" And I said to them, "If I had to give it to you, you would not get a cent." They have built little board shacks of one room, one right after another. I have been living down South for five years, and six months before I moved into that town you could have rented one of those little shotgun houses for $1 a month. To-day they are charging $18 or $20 a month for them. Lots that they could not sell for $10 or $15, they have now jumped the price of to $250—and then they wonder why the man who is going down to the Gulf coast to work in a shipyard is not satisfied. We have got the climate down there, and we have got the material to build the ships, and things ought to be remedied. We would be the happiest people on the face of the earth if they would just let us build ships.

The CHAIRMAN. How many shipyards have you down there?

Mr. FRANCK. Five shipyards.

The CHAIRMAN. How many ways have you?

Mr. FRANCK. There are 18, all told.

Senator HARDING. How many men are working in those yards, all told?

Mr. FRANCK. Four thousand men in the five yards and they are adding to the number continually. And they are just stacked up there like carcasses in a room.

Senator RANSDELL. Do you know how many shipyards there are on the Mississippi coast?

Mr. FRANCK. About 11.

Senator RANSDELL. Eleven shipyards?

Mr. FRANCK. Yes, sir; including Biloxi and Gulfport.

Senator RANSDELL. On the Gulf coast of the State of Mississippi?

Mr. FRANCK. Yes, sir; we have them at Gulfport, Biloxi, Pascagoula, and Moss Point.

Senator FERNALD. Are there any dry docks down there?

Mr. FRANCK. No, sir; but the Dirks-Blodgett yard and the International yard are figuring on putting them up. The International Co. are going to put up a steel plant also.

Senator HARDING. Have you talked to Mr. Flannery, of the Shipping Board housing committee, about this?

Mr. FRANCK. No, sir; we have not talked with him yet. We wanted first to see the chairman of this committee, Senator Fletcher, and we will go up to the Shipping Board this afternoon.

Senator HARDING. Then I think you gentlemen should talk to Mr. Flannery, who is in charge of the Emergency Fleet Corporation housing program. And it seems to me that your proposition to have houses built at $700 apiece ought to be considered by the Shipping Board with care, because most of the people who have come down here in connection with housing have asked for $5,000 houses.

The CHAIRMAN. From $2,000 up.

Senator HARDING. Do you mean to say that if the Government should undertake the building of houses, at $700 apiece, that that would meet the situation down there satisfactorily?

Mr. FRANCK. Yes, sir; easily.

Senator CALDER. What kind of houses would they be?

Mr. FRANCK. Four or five room frame houses.

Senator HARDING. Sealed houses?

Mr. FRANCK. Yes, sir; sealed houses inside; we do not use much plastering down there; and they would be sided on the outside on the bungalow type.

Senator RANSDELL. Does that figure include the price of the ground?

Mr. FRANCK. Yes, sir.

Senator CALDER. And what improvements?

Mr. FRANCK. Bath tub, lavatory, sink in the kitchen, and electric light.

Senator CALDER. I do not see how you can do it at that figure.

Mr. FRANCK. We do it down there right along.

Senator HARDING. We are much obliged to you for your statement.

The CHAIRMAN. Is there anybody else in your delegation whom you would like the committee to hear, Mr. Franck?

Mr. FRANCK. Yes, sir; I would like you to hear Mr. Bedsole.

The CHAIRMAN. We will be glad to hear him.

STATEMENT OF MR. W. T. BEDSOLE, OF PENSACOLA, FLA.

Mr. BEDSOLE. Mr. Chairman, my name is W. T. Bedsole, and I am from Pensacola, Fla. We have a big steel yard being built there, which is claimed to be one of the biggest yards in the South; that is in what is known as "Fisherville," in Pensacola, a little separate from the rest of the city, where you could rent a house for from $4 to $6 a month before this plant started in. Now they have raised the rents to $19 or $20, and they are figuring on raising them again,

since the shipbuilding industry started in there, about four weeks ago; and you can not get a room in Pensacola.

It is the same situation at Milton, Fla.; we have a lot of private shipyards that are not doing work for the Emergency Fleet Corporation, but we are building vessels for the Italian Government and the French Government.

The CHAIRMAN. I know you have some big mills there.

Mr. BEDSOLE. Yes, sir; and the men working there have no place to stay; and a man will go there and work a week or 10 days, and get paid, and then he leaves.

At Pensacola there is land in front of this shipbuilding plant that a man could have bought at $25 on the installment plan before this work started in, and now they want $500 for the lot. And they have not made any provision whatever for housing the workmen.

The CHAIRMAN. Has the company which has the building of those foreign ships there acquired a tract of land adjoining the yard itself, with the idea of putting houses on it?

Mr. BEDSOLE. Well, if they have they have never mentioned it to us.

The CHAIRMAN. Well, they may have acquired the land, but may not propose to build the houses. Of course, you gentlemen realize the importance of the local communities doing everything they can to supply those facilities and not looking to the Government to do it.

There have been representatives of a number of communities down South that have been up here trying to get some ships given to their particular town or locality to build. And we have been claiming that this great housing problem that they have in the large industrial centers in this part of the country does not confront us down there on the Gulf and South Atlantic coasts. We have been telling the people here that; and we have been hoping that the communities down there would supply the housing facilities themselves as far as possible, because we want to get the shipyards down there—we want to build up that industry. We have the water; we have the ports; we have the raw material; we have the climate; we have the labor. We have the world beat on everything. Now, I do not want them to have any excuse for not building ships down there, where all of the conditions are so favorable, that they would have to spend a lot of money to take care of the housing of the workmen and their families if they gave the people down there contracts to build ships. We do not want to give them any argument or excuse at all for not putting those shipyards down there and keeping them busy; that is one of the things we have been aiming at—to get the shipyards scattered around down there, instead of being congested in the large industrial centers.

And we have been hoping that those communities would themselves do something to meet the housing problem. Take Pascagoula, for example; it looks as if the people of that community ought to get busy and try to supply the necessary houses for the people who are going in there to work in the shipyards.

I am not saying that to discourage you in your efforts to get necessary housing for yourselves and other workmen there; the housing must be provided. But I merely say that to indicate to you what has been in our minds; we have been in hopes that the communities

would themselves take hold of that situation and provide the housing facilities. If they can not do it fast enough, the Shipping Board will doubtless help them out—and they certainly have the same reason for helping you people down on the Gulf and South Atlantic coasts that they have for helping other people in other parts of the country. And, as a matter of fact, you have just as good reasons for demanding it of the Shipping Board as any other section of the country. Proper housing is necessary to the construction of ships, and it must be provided whether by the Shipping Board or by the local communities, or by both.

Who is the next member of the delegation who desires to address the committee?

STATEMENT OF MR. J. W. ALMAN, OF ORANGE, TEX.

Mr. ALMAN. Mr. Chairman, my name is J. W. Alman, and I am from Orange, Tex. Let me say at the start that the landlords in our community have completely taken advantage of us. Since I have been in Washington our Chamber of Commerce has written me a letter backing us up in this proposition to see about getting some housing accommodations there. As to housing Orange, Tex., is in exactly the same situation as Pascagoula, Miss.; we have been treated in just the same way.

The CHAIRMAN. How many men are employed in the shipyards there?

Mr. ALMAN. There are five big shipyards, and they employ in the neighborhood of 4,000 or 5,000 men.

The CHAIRMAN. What is the population of the town, outside of those or 5,000 shipyard workers?

Mr. ALMAN. It was 8,000, about.

The CHAIRMAN. And you lack houses for the workmen there, do you?

Mr. ALMAN. Yes, sir; there is a very serious lack of them; there will be a little four-room house, and in some cases there will be a family in each room.

The CHAIRMAN. Well, of course, you will go into the details as to that with Mr. Flannery, of the Shipping Board. You should tell him what such houses will cost down there, because his plans for houses for this part of the country contemplate a more expensive house; some of these latter will be of brick, or perhaps of concrete, but down there you do not need that kind of construction; your climate does not call for it.

Mr. ALMAN. No, sir.

Senator RANSDELL. What could you build houses for in Beaumont or Orange, Tex., such as those which can be built in Pascagoula, Miss., for $700 apiece?

Mr. ALMAN. Do you mean the cost of the lot and house?

Senator RANSDELL. Yes.

Mr. ALMAN. $1,250.

Senator RANSDELL. They cost a good deal more there, then, than they do at Pascagoula, Miss.?

Mr. ALTMAN. Yes, sir.

Senator RANSDELL. Why should the same type of house cost more in Texas than in Mississippi? Is lumber higher in Texas?

Mr. FRANCK. Yes, sir.

Mr. ALMAN. The scale of wages is higher and the mills charge more for the material.

The CHAIRMAN. And the land costs more, too, does it not?

Mr. ALMAN. Yes, sir.

Mr. FRANCK. I just want to emphasize the point, Mr. Chairman, as to the necessity of somebody getting behind the officials here and seeing that the things are done. This illustration is somewhat outside of the present discussion, but it shows that there is not the force behind the acts of the officials that there ought to be. There should be more "punch" behind them. The wage-adjustment board claim that they issue orders and that they should be complied with; and yet Mr. Bedsole can tell you, as he had occasion to find out, how the orders for the release of men so that they can work in another shipyard are being disobeyed and abused. Mr. Bedsole asked the officials for the release of some 200 men who are not working. Those 200 men have been denied their release by the company they were working for, and they could not go to work for another company because they could not produce their release. We have been up here a week trying to get that straightened out. Mr. Bedsole got a telegram from home saying those men were getting tired of waiting. And I say that there is something behind that wage board so that they do not seem to have the "punch" that they ought to have.

And that is why I say that on this housing proposition, we think they will need some force or some "punch" put behind them so that we can get something done.

Mr. RANSDELL. I do not quite understand that illustration you have given. Do you mean to say that there are some men down there, some 200 of them, who have been out of work, and yet can not get work in other shipyards?

Mr. FRANCK. There was an order promulgated by the Shipping Board some time ago making it necessary for a man who left the employ of one shipyard to get a release from that shipyard before he could get employment at another yard. That was done to prevent the different yards competing with each other for labor, and one yard taking men away from another. But certain of the employers have taken advantage of that order; and if they do not like men, for example, they lay me off, but I can not get a discharge from them so as to get employment at another yard; I might want to go to work for another yard, but I am prevented from doing so, although I am no longer working at that yard.

Senator RANSDELL. They will not put you to work and yet refuse to give you a discharge? Is that what you mean?

Mr. FRANCK. Exactly. And that shows that there is something lacking in that board that they ought to have.

The CHAIRMAN. I should think the Shipping Board would readily remedy that situation; have you laid it before the Shipping Board?

Mr. FRANCK. Yes, sir; we took it up this morning with Mr. Piez; and he says he will look into it and see that what is necessary is done

Senator RANSDELL. It seems very unjust that such a condition should be allowed to exist.

The CHAIRMAN. Yes, it does. You see, we act very promptly here; as soon as this housing situation was presented to us, we undertook to legislate on it, and the Senate at once passed the housing bill.

Who is the next speaker?

STATEMENT OF MR. J. W. SHARIT, OF BRUNSWICK, GA.

Mr. SHARIT. The way the housing situation has been handled in Brunswick, Ga., Mr. Chairman, is this: They took a lot of buildings in the town that were not in use, and cut them up into rooms for the men. But those rooms are now all occupied; there are none available. When I first went there a year ago there were houses that rented for $10 a month, now they want $25 a month for those same houses.

Mr. BEDSOLE. At Pensacola there were a number of houses that were more or less dilapidated, simply because business was so dull when the war started; they have not made a start toward repairing those buildings in any way. There are at least 300 houses at Pensacola which, with very little repairs, could be made habitable.

The CHAIRMAN. I suggest that you call that to the attention of Mr. Flannery, the Shipping Board representative in charge of housing. The law that we passed specifically provides authority for the Shipping Board to commandeer houses where necessary, and it has the necessary authority to repair them.

Mr. BEDSOLE. That was my impression, and that was the reason we came before the committee.

We thank you, Mr. Chairman and gentlemen, for giving us this hearing.

(Thereupon, at 3.40 p. m., the committee adjourned to meet at 10.30 o'clock a. m., Thursday, April 4, 1918.)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION.

FRIDAY, APRIL 5, 1918.

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
Washington, D. C.

The committee met, pursuant to adjournment, at 10.30 a. m., in the committee room, Capitol, Senator Duncan U. Fletcher presiding.

Present: Senators Fletcher (chairman), Ransdell, Vardaman, Bankhead, Nelson, Jones, Harding, and Calder.

The CHAIRMAN. Mr. Denman, the committee will be glad to have you make any statement that you wish to make.

ADDITIONAL STATEMENT OF HON. WILLIAM DENMAN, SAN FRANCISCO, CAL.

Mr. DENMAN. Mr. Chairman, in reading over the testimony of Mr. Connick, with reference to the Hog Island contract and the negotiations leading to the contract, I felt that, probably unconsciously, an erroneous impression has been created as to Mr. Connick's negotiations with the Shipping Board and Gen. Goethals, at the initiation of this entire scheme of fabricating ships through semi-Government plants.

As you read Mr. Connick's testimony, you gather the impression that a vigorous and an acrimonious contest was being carried on between Gen. Goethals and the Shipping Board, and that, as an innocent bystander, he gracefully withdrew to permit the contestants to indulge in their fracas without his interruption or interference.

I do not think Mr. Connick intended to convey that impression, but the testimony gives that impression.

The fact is that Mr. Connick came down to us ready to accept a compensation for about $200,000,000 worth of completed ships—$200,000,000 more or less—about half of the work on which would be done, as we then figured, and as testimony now develops, under the supervision of the men to be furnished by this Vanderlip group of corporations.

The compensation which he was ready to accept was between $12,000,000 and $15,000,000. The exact value of the work which he would actually supervise I could not then figure. I am now drawing a distinction between the work to be done in the Government assembling yard and the work to be done by other contractors outside, in the fabricating yards, and in the plants manufacturing machinery, boilers, and equipment for the vessels.

But we hazarded a guess at that time that it would be about half and half; and the testimony that has since been given here, I think,

substantiates that estimate. So that the figure which he was ready to accept, and desired at that time, was between $12,000,000 and $15,000,000 for the supervision of from $100,000,000 to $125,000,000 of work to be done in this semi-Government plant and its construction.

What made my associates and myself in the Shipping Board hesitate and ask for further figures was this: We could not see, as we talked with Mr. Connick, that we were to get out of this group of corporations anything more than the "know-how"—and that phrase was used at that time—of, perhaps, half a dozen men; that this enterprise was a completely new creation, in which the Government furnished the basic idea of fabrication, of all of the capital, paid all the salaries, except for these few supermen that were to be put into a new organization——

Senator VARDAMAN (interposing). Do you mean by that expression superior men, or superfluous men?

Senator NELSON. No; I think "supermen" is the best term.

Mr. DENMAN. That is the phrase that seemed to fit the situation. He was simply acting as an agent trying to make a good bargain for his group. I regard Mr. Connick as a very able man; he has done great work in California. He has great force and great executive ability. I have always felt that he would drift to Wall Street and make a success there.

But the Government was to furnish all of the money, and to pay all of the salaries, except of these few men at the head; and, furthermore, it was to furnish it commandeering power, so that what even the greatest organizations of capital themselves could not do, this group of five men would be able to do; they could stop the flow of steel to other places and divert it to this place; they could use the Government pressure on labor, and they were to have every assistance that the Government, with all of its war powers, could give them. And that was to be part of the bond that we were to give the Vanderlip group, through Mr. Connick's agency; $12,000,000 for supervising an estimated $125,000,000 worth of work, where the plant is owned by the contractor, and the scheme is furnished by the contractor, and the running capital is furnished by the contractor, is one thing; but that figure, for the job in this case, seemed to us open to question.

The CHAIRMAN. Well, they were to supervise the building of the plant also?

Mr. DENMAN. They were to supervise the building of the plant. But as to that you will find—and I will later insert in the record a letter that I have from Gen. Goethals—that entire plan had been worked out before the contract had been entered into. We had already designed the ship ourselves, through our own employees, and the great combination that Mr. Vanderlip had perfected behind all of this—or his associates had perfected—of the steel fabricating yards that were to furnish the material, had already been entered into. The huge profits to those in the fabricating combination were entirely apart from the $12,000,000 fee.

Senator NELSON. Let me ask you this question here: Who prepared the plans for the yard? Was that done through the Government, or was it done by these "know-how" men?

Mr. DENMAN. My impression is—I say "my impression" because the plans came to me from Gen. Goethals—that they were prepared by some one in Stone & Webster, or some one of the Vanderlip group of corporations. The scheme for fabricating ships was not new. It had been suggested by Secretary Redfield several years before.

We asked Mr. Connick to get for us the figures and segregate the cost in the yard and outside the yard, of these vessels, and Mr. Connick's graceful retirement from this alleged controversy was a retirement for a day to give us the next morning those figures. And the next morning, and the next morning, and the days passed, during which time the press, as you will remember, was filled with stories of disagreements between Gen. Goethals and ourselves. And the figures did not come.

Mr. Connick's proposition was an acceptance of Gen. Goethals's offer. The $12,000,000 for $200,000,000 of work, about $125,000,000 of which they would supervise, was his estimate and his offer to them.

I will now read from a letter Gen. Goethals to me, of July 13, 1917. I will say that this is not a confidential letter, because, like most of Gen. Goethal's thoughts and plans, when he desired to communicate them to those who had employed him he first gave them to the public.

On Monday I shall offer the contracts for the building of two plants to be owned by the Government for the construction of fabricated steel ships, to produce 400 ships of an aggregate tonnage capacity of 2,500,000 tons within the next 18 to 24 months.

For the building of these two yards and the construction of the ships in them, I shall offer as compensation to the agents who undertake the work, a fee of approximately 6 per cent of the total cost of the work, with rewards for savings on cost, and for speeding delivery. Provision will be made for decreasing the fee to prevent unnecessary cost.

The contracts will give the Government the benefit of Government fixed commodity prices, and will provide for cessation of work at any time, so that the appropriation may not be exceeded.

Options will be given to the contractors to purchase the plants at arbitrated values on the completion of the work.

The design of the ship is ready; the plans of the yard are ready; the distribution of the work of furnishing material and of fabrication is arranged.

The 6 per cent mentioned in the letter for the completed ship meant 10 per cent for the work actually supervised by the men from the Vanderlip corporations. The Government seemed to be proposing to pay $12,000,000 for the work of five or six men for two years.

The CHAIRMAN. Do you want to put that whole letter in the record?

Mr. DENMAN. I simply have a part of it here, Mr. Chairman; it is all that refers to Hog Island, however. The letter was published in the press at the time; so that I am not divulging any correspondence that passed between us that Gen. Goethals himself has not made public.

The Shipping Board was willing to spend any amount of money to get tonnage. We had signed up to this time dozens of contracts, giving very large and stimulating profits to small steel shipbuilding yards. There never had been a question about the profit to be allowed to these small and new yards to stimulate them to invest further capital and to expand their ways and get their enterprises running. We felt that, with the smaller men, we could not get them to make the very rapid advances in organization that were necessary, without that kind of stimulation.

The question of profiteering at Hog Island was the only one between Gen. Goethals and myself when we handed in our resignations.

I felt that, in a great transaction like this work, where the Government itself, and its power, was the main reliance for the success of the enterprise, anything that looked like a profiteering payment to the great people on top who could well have given us for nothing the services of these five or six men, would be simply an invitation to every laboring man, from the lowest unskilled labor up, to demand a wage on a similar basis; and that instead of getting us more ships and faster ships, this kind of overloading of profit at the top would impede the progress of the work, by starting strikes and labor disputes up and down the scale of labor organization.

Senator VARDAMAN. And in that respect your apprehensions have been realized?

Mr. DENMAN (continuing). And in response to a perfectly natural and human instinct that "I should have my share of this if these big fellows above us, who can well afford to give their services free, are going to get so much."

It is greatly to the credit of the gentlemen who have succeeded us that a very much lower and fairer figure was fixed on for the acquisition of this skill that these men had to give.

Senator JONES. Mr. Denman, before you proceed further will you allow me to read an extract from a letter that I have just received from a gentleman of Seattle, Wash., which is very much in accord with the suggestion you have just made and shows how the people of the country actually are looking on the situation? The writer of the letter calls attention to the conditions in shipyards and says:

> Although it does not seem to be an established fact, it is generally believed that these ships are being built on a contract price and not on the basis of a percentage of profit above cost. This price is also believed to be greatly in excess of what it should be.
>
> Therefore the men think that when they work efficiently they are only putting increased profits into the hands of profiteering capitalists and in many cases working themselves out of a job.
>
> If the Government desires earnest cooperation from labor, it must make conditions such that the wage earners are only helping the Government to win the war, and not helping the capitalists to make greater profits.

Apparently that gentleman has the very idea to which you have just referred.

Mr. DENMAN. Is it not inevitable that that should happen?

Senator JONES. Yes.

Mr. DENMAN. A man does not have to have a profound knowledge of human nature to see that that is just what would happen under the circumstances.

Senator JONES. Yes; that is true.

Mr. DENMAN. And the truth of the matter is that those of us who were in the Shipping Board, and especially those of us who came from the West and South, had a deeper understanding of the labor situation than our general manager. We were able to make that agreement with the sailors, because we understood their aspirations and their desires; and that agreement has stuck. This is almost the only class of labor that has gone through the war without a strike.

The CHAIRMAN. The writer of that letter, however, is somewhat in error regarding the nature of the contract.

Senator JONES. Yes, I know; but he shows that that is the general belief.

Mr. DENMAN. Now, I am going to say a thing here which I think should be said, because of the prevalence of gossip and rumor—about Admiral Capps.

Admiral Capps held down this price and got this contract in very fair shape—Admiral Capps and Mr. Hurley—and afterwards Admiral Capps resigned on account of ill health; and there is a good deal of the unfortunate kind of gossip that you hear in Washington about the reasons for Admiral Capps's resignation.

On the day on which I left the Shipping Board, on the evening of that day, I sat down with Admiral Capps and outlined something of our work; and he said to me substantially this:

Mr. Denman, until 2 o'clock to-day I had not the faintest notion that I was to receive this appointment. I am a sick man. But I am a naval officer, and I am going through, as far as I can.

And he went into it with that kind of gallant spirit, that he would go through as far as he could; but the sickness was there, and it was not an afterthought, and it was not later cooked up to account for his separation from the Shipping Board.

The CHAIRMAN. Did you discuss with him this particular pending contract?

Mr. DENMAN. Yes; I detailed very fully what I knew of the situation; but you see I had not received the figures from Mr. Connick. They were in a position to give an estimate on the total cost of the ships. Those detailed figures should all have been ready, you see.

The CHAIRMAN. Did the Shipping Board itself have any data or any idea about the cost of the ships?

Mr. DENMAN. That was the strange thing about it. We asked Gen. Goethals for those figures, and he said they were over in the American International Corporation. Here was the Government embarking in a great enterprise, and the only place where the figures as to that enterprise were was in the hands of those other people.

The CHAIRMAN. You had to take the cost of other kinds of ships and base you estimate partly on that, did you?

Mr. DENMAN. Yes, Mr. Chairman. Of course, the fabricated ships were an entirely new proposition; and presumably we were going to make great savings by the rapid outturn of ships on the ways due to the standardization of the parts; and the figures used in the case of other ships would be of some value, but not very much. As a matter of fact, I think the costs are going to be higher than they were estimated at that time.

Now, I would like to show how early the Shipping Board had matured the idea of using the Diesel engine. In a statement that I gave to Senator Phelan, which he read into the Congressional Record on August 15, 1917, I enumerated at the end the various things that the Shipping Board had then determined as matters of policy, and this particular paragraph might well go in the record here:

Fifth. The inauguration of the building of a Diesel motor-driven fleet of merchant ships, of the Norwegian George Washington type, which, with the great saving in fuel and cargo space, wide sailing radius, and reduced labor cost, would free us from bunker control of other nations and give us a dominance in maritime carriage after the war.

This proposal, which to our minds was the best thing we had to offer for the after-the-war period of the American mercantile marine, has been receiving very serious consideration from the Shipping

Board and we trust in the very near future may mature into some actual activity in that direction. As we seem to be embarked in a long war, these vessels will have a war as well as a postwar use.

I am firmly convinced of the value of the Diesel engine and of the Diesel boat, and I have been and am advising my clients that they begin to look to that class of tonnage; that they make their investments in that class of plants. There is not any doubt that the Diesel is the coming motive power for over-seas ships, and we can look to the Japanese and the Germans, our most vigorous competitors, to have very considerable fleets to initiate the after-the-war fight for the control of the sea when we get back into normal commercial conditions.

Senator CALDER. Will you please explain what the Diesel motive power is?

Mr. DENMAN. The Diesel engine is an internal-combustion engine in which the power is produced by a combustion of fuel oil just below the point of explosion. As you come up in the combustion of gases, you know, you have just a flame first, and then you have very high temperatures of combustion, and then you go over into the explosion group of chemical changes. The Diesel motor gets its power from a very high combustion but under the explosion point.

The CHAIRMAN. May I ask what your idea is regarding the terms and conditions of the contract as finally made with the Hog Island people—whether you would regard it as a reasonable contract for the Emergency Fleet Corporation to make?

Mr. DENMAN. I have not examined it carefully enough, Mr. Chairman, to say. If I could judge by the other contracts under the Shipping Board, I would expect it to be very carefully drawn. I have seen a number of other contracts drawn by them for other classes of work, but I have not gone into this contract carefully enough to give an opinion on it.

The CHAIRMAN. Do you know the amount of compensation under that contract?

Mr. DENMAN. Well, it is very hard to get at the exact figure from the contract.

The CHAIRMAN. That is already printed in the record.

Mr. DENMAN. I understand that it figures out about 4½ per cent. I know it is very much lower than the figure on which Gen. Goethals and Mr. Connick had their understanding.

Senator VARDAMAN. You say the figures are in the record, Mr. Chairman?

The CHAIRMAN. The contract is in the record.

Senator VARDAMAN. Yes; I think the contract is in the record. But some of the witnesses before this committee have testified that it is 3 and a fraction per cent, and others have testified that it is a 5 per cent fee.

The CHAIRMAN. It is 5 per cent on the ships; but when you take into consideration the cost of the plant, which the company also supervises and for which they are not paid, and then the cost of the ships, it would not amount to so much.

Senator VARDAMAN. And then they did not estimate the fees paid to the subcontractors.

The CHAIRMAN. Yes; that is the way they distinguish that and arrive at the amount of fee to the contractors.

Mr. DENMAN. What should really have been done there, if I may hazard the suggestion, is this: Those gentlemen in New York should have said to the Shipping Board, "Why do you not form a $2,000 corporation and accept from us these five or six men at $1 a year?" If capital is going to justify the $1 a year system why, when we had a great constructive enterprise for the Government to carry through, could they not have said to us, "Take these men"?

Then we could have gone to labor, and we could have said, "Now, the fellows on top with the money are contributing their bit. Do not press us all the time for increased wages; do not strike; do not stop your work; but come in and be at least as patriotic as your employers." With what grim irony would labor meet such an appeal to-day.

If we could only put our finger on one place in this country where that had generally been done, it would simplify the labor problem enormously. But these New York men started in at 10 per cent, or $20,000,000 for five men's brains, and they got one administrator to agree to 6 per cent, or $12,000,000, and they fought all the way down the line until they are now getting what must be a very liberal compensation; and in the process of doing it they have done exactly, in the way of delaying things, what it is complained that the labor men are doing in the way of delaying things, to get a similar share.

Senator VARDAMAN. I think so. You can not get any controversy with the members of this committee on that proposition.

The CHAIRMAN. Is that all? We are very much obliged to you, Mr. Denman.

(Thereupon the committee proceeded to the consideration of executive business, after which the following proceedings were had:)

STATEMENT OF MR. J. LEONARD REPLOGLE, DIRECTOR OF STEEL SUPPLY, WAR INDUSTRIES BOARD.

The CHAIRMAN. Will you please state your name and occupation?

Mr. REPLOGLE. J. Leonard Replogle, director of steel supply, War Industries Board.

The CHAIRMAN. How long have you been in that position?

Mr. REPLOGLE. Since August, 1917.

The CHAIRMAN. Were you born in the United States?

Mr. REPLOGLE. Yes, sir; I was born in Bedford County, Pa.

The CHAIRMAN. A statement was made before the committee several days ago by Mr. Baldwin, vice president of the American International Corporation, to the effect that that corporation, which is building ships at Hog Island, was delayed several weeks owing to the lack of steel. He said their orders had been in for some time, and that they were short 50,000 tons of steel; that they thought some of it was moving, but they were not quite sure even about that.

Can you give the committee any information on that subject that would help in dealing with that situation?

Mr. REPLOGLE. Mr. Chairman, that condition is due to a number of causes; and right here, I want to correct the general impression that the steel mills have fallen down. They have responded wonderfully well to every request we have made of them; but their operations were restricted in January and February, to an enormous extent, owing to their utter inability to secure sufficient fuel. Some of the m

mportant plants—I will say most of the more important plants—were operating at 40 to 50 per cent of capacity; and some of the plants, for instance, the Worth Bros.'s plant at Coatesville, Pa., the plant of the Midvale Steel & Ordnance Co., one of the very largest plate producers in the United States, were unable to make a ton of steel from January 17 to February 20, over one month, on account of inability to secure coal, despite every effort made by the War Industries Board with the Fuel Administration and the railroad people to give them relief.

The CHAIRMAN. Will you give the committee an idea of the principal mills that furnish the steel?

Mr. REPLOGLE. Do you mean ship steel?

The CHAIRMAN. Yes.

Mr. REPLOGLE. Well, the larger plants are the Illinois Steel Co., at Chicago and Gary, Ind.; the Carnegie Steel Co., in the Pittsburgh district; their plate mill is at Homestead; the Illinois Steel Co., at Coatesville; the Cambria Steel Co., at Johnstown, Pa.; the Luken Steel Co., at Coatesville, Pa.; the Allegheny Steel Co., at Pittsburgh; the Belle Iron Works, at Steubenville, Ohio; Allen & Wood Steel & Iron Co., at Punxsutawney, Pa.; the Nagel Steel Co., at Pottstown, Pa.; the Glasgow Iron Co., at Pottstown, Pa.; the Lackawanna Steel Co.——

The CHAIRMAN (interposing). Are those plate mills or rolling mills?

Mr. REPLOGLE. They are plate mills.

The CHAIRMAN. What I want is to go back further than that, to the mills that furnish the steel to the rolling mills.

Mr. REPLOGLE. Practically all of these mills are interrelated companies, who own their own iron mines, and Lake vessels, and their own blast furnaces and open-hearth furnaces.

The CHAIRMAN. They make the steel and also roll the plates?

Mr. REPLOGLE. Yes, sir.

Senator HARDING. They are producers from the ore to the finished product, are they?

Mr. REPLOGLE. Yes, sir; from the ore to the finished product.

The CHAIRMAN. I supposed that the largest concern doing that was the United States Steel Corporation?

Mr. REPLOGLE. United States Steel Corporation is the largest; they have about 3,500,000 tons capacity of plates, as compared with a total output of about 6,000,000 tons.

The CHAIRMAN. They produce the steel and also the plates?

Mr. REPLOGLE. They produce the steel and the plates.

The CHAIRMAN. Then there is Mr. Schwab's company, the Bethlehem Steel Co.?

Mr. REPLOGLE. Well, the Bethlehem Steel Co. produce some plates, but they are not very heavy factors in that at the present time; they are more in ordnance work—guns, projectiles, etc.

The CHAIRMAN. Then, there is the Midvale Steel & Ordnance Co.?

Mr. REPLOGLE. Yes; they have two very large plants, one at Coatesville, Pa., and the other at Johnstown, Pa. Then, there is the Cambria Steel Co., at Johnstown, Pa.

The CHAIRMAN. They produce both, do they?

Mr. REPLOGLE. They produce plates and a very great variety of other finished steel products.

The CHAIRMAN. Are they not the chief producers of the steel?

Mr. REPLOGLE. Yes, sir.

The CHAIRMAN. Are they [illegible] the Mesta[illegible] of Pittsburgh?

Mr. REPLOGLE. With the Mesta[illegible] the Pittsburgh Steel Wheel Co. They are [illegible] producers of steel. The Standard Steel [illegible] Steel Wheel Co. [illegible] of their subsidiaries [illegible] steel but they are not large factors.

The CHAIRMAN. The trouble is furnishing the necessary steel for the shipyards goes back to the producers of the steel, does it not?

Mr. REPLOGLE. The loss in this steel production [illegible] The trouble in the shipyards is due to several other causes. We believe that it was unfortunate that so much of the steel orders were placed in the early stages with the far Western concerns, and we believe that transportation has been one of the biggest factors in the delay at Hog Island. Something like [illegible] per cent of the steel has left the mills, and only [illegible] per cent of March [illegible] has been received at Hog Island.

The CHAIRMAN. The Hog Island people claim that they got better prices from the western mills than they could get from the eastern mills.

Mr. REPLOGLE. Well, I think that the United States Government has sufficient power in war time to compel the eastern factories to come down to a fair and reasonable price, and I think that could have been done.

Senator NELSON. They have come down now, but they did not at first; that is why they let those contracts out in the West. That is what the testimony before this committee shows.

Mr. REPLOGLE. Well, regardless of the reason, I think that is one of the factors in the delay at Hog Island.

The CHAIRMAN. Do you think that steel cuts a figure in that delay?

Mr. REPLOGLE. I do.

The CHAIRMAN. They do not say that the delay is due to delays in transportation to any extent; they talk as if the material has not been furnished by the mills.

Senator HARDING. Will you read from a letter I am going to write showing the quantity of steel furnished to shipyards as compared with their requisitions?

Mr. REPLOGLE. Yes, sir. I wrote to Mr. Piez yesterday, showing him that, in the first quarter of this year, they had shipped from the steel mills to the fabricators a total of 618,177 tons of steel, as compared to the estimated requirements of the Emergency Fleet Corporation of 590,428 tons. In other words, the mills shipped 27,749 tons in excess of the estimated requirements.

The CHAIRMAN. But that did not catch up with the amount they had been behind before, did it?

Mr. REPLOGLE. Well, they were very little, if any, behind before that.

I think, also, as regards Hog Island, that a big factor is the delay in getting plans to the fabricators. A number of the fabricators have reported that they have a very large tonnage of steel on hand and were unable to work it up, on account of not having detailed dra

Senator NELSON. Instead of speaking of generalities, I wish you would now get down to this Hog Island plant. In the first place, what plants are furnishing material for that yard? Do you know what they are?

Mr. REPLOGLE. Yes, sir.

Senator NELSON. What are they?

Mr. REPLOGLE. Do you mean fabricated steel?

Senator NELSON. What plants are there that are furnishing material for the Hog Island shipyard?

Mr. REPLOGLE. You will have to make that question more specific. I do not know whether you mean the steel mills or the fabricating plants.

Senator NELSON. Both. The Hog Island people claim that they are short of steel; Mr. Baldwin's statement is very strong on that point; he said that they could not get the material. Now, where do you get your material from?

The CHAIRMAN. They claim also, as I recall, that it is not the fault of the fabricators; they claim that the fabricators are behind in their deliveries, but the fabricators can not get the steel from the mills; that is what the fabricators have reported to them.

Mr. REPLOGLE. There are some mills, for instance, the Midvale Steel & Ordnance Co.'s mill at Coatsville, Pa., has been restricted, as I have stated, on account of fuel conditions; they have been behind on their total schedule of plates for that reason, but they now expect to make it up, as they have a better fuel supply.

Senator NELSON. That is not a western concern. You said a moment ago that the delay occurred because some of the contracts were let out West.

Mr. REPLOGLE. No; but the eastern mill ships the material to a far-western fabricating plant.

Senator NELSON. No; but we are talking about the shortage at Hog Island.

Mr. REPLOGLE. Well, that is true——

Senator NELSON (interposing). That is not a far-western plant.

Mr. REPLOGLE. You misunderstood me. These steel mills in the East ship to the far-western points the raw steel, which they roll for fabrication at western points.

Senator NELSON. Yes.

Mr. REPLOGLE. Then the fabricated material is shipped back to Hog Island. I mean by that, concerns like the Bethlehem Steel Co., at Pottsdam, Pa., and South Bethlehem, Pa. They roll the steel and ship it out to those far western points for fabrication.

Senator VARDEMAN. To what places?

Mr. REPLOGLE. Minneapolis, Minn., Kansas City, Mo., Omaha, Nebr., and Chicago, Ill.

Senator VARDAMAN. Are there no fabricating plants nearer than that?

Mr. REPLOGLE. There are many of them. And I wrote Mr. Hurley in November, calling his attention to the fact that the fabricating plants in the East, near the Hog Island shipyard, were operating at a very low rate of capacity.

Senator NELSON. The point on which I want to get specific information is, what steel plants are short in furnishing material for the fabricating plants?

Mr. REPLOGLE. The Midvale Steel & Ordnance Co. is one I think; the Nagel Steel Co., at Pottstown, Pa., is another; the Allegheny Steel Co., in Pittsburgh, is another.

Senator NELSON. Can you not expedite work in those mills?

Mr. REPLOGLE. We have done so, Senator. I discussed that with Mr. Corey individually, and we practically eliminated the rolling of plates for car construction, which is also very important, but we sidetracked that, and are giving the right of way to the Emergency Fleet Corporation material.

Senator VARDAMAN. Let me get from you a little more light on that question of the enormous expense of shipping the steel from the East to the West and fabricating it there and shipping it back to the East again. I can not understand why that arrangement was made; I think it is a very extravagant method.

The CHAIRMAN. They explained that to the committee, by saying that the arrangement at the time was more favorable to the Government; they could get the steel shipped out there and fabricated and shipped back to the yard at less cost than it could be fabricated for in the East. That was their position—and that they could save time also.

Senator VARDAMAN. What do you think about that?

Mr. REPLOGLE. Well, I have been told that that is the fact; but I believe the Government in war times should not have permitted that to be done.

Senator VARDAMAN. It is a loss of time and——

Mr. REPLOGLE (interposing). And an enormous factor in the congestion of transportation.

The CHAIRMAN. Unless the fabricating plants in the East were overcrowded, so that you could not get it done there.

Mr. REPLOGLE. They were not overcrowded. There were many of them that were not running full capacity.

Senator HARDING. Have you, among your charts, a statement showing the orders for steel in connection with the several activities of the Government, and of private industries, and the relative shipments to each of those?

Mr. REPLOGLE. I have.

Senator HARDING. I wish you would bring that out in your statement, because there is an impression that has gotten out that many of the steel mills have given preference to their private orders, owing to the higher prices over their Government orders.

Mr. REPLOGLE. That is absolutely incorrect; and as indicative of that I might say that the United States Steel Corporation have an order for 25,000 tons of plates for the Cunard Steamship Co. at a price of 8 cents a pound; and the Cunard Steamship Co. have been utterly unable to get those plates from the Steel Corporation, which has been making their plates at 3¼ cents a pound, which is the price agreed upon by the War Industries Board and the steel manufacturers. In other words, they have executed the lower priced contracts, and it is an absolute fact that price has had no consideration in the production of important steel for the Government.

The CHAIRMAN. What corporation is that?

Mr. REPLOGLE. The United States Steel Corporation.

The CHAIRMAN. Is that same thing true as to all the others?

Mr. REPLOGLE. That is true as to all the others. And we get these reports (indicating papers in Mr. Replogle's hand) from every steel concern in the United States every week, which show the amounts on hand for the Army, the amounts for the Emergency Fleet Corporation, and for all departments of our own Government, for the allied Governments; the amount of orders that we receive from each department of our own Government and the allies, and the amount that is shipped under each department; and the relative importance of that order.

The CHAIRMAN. Does that chart show the outstanding contracts?

Mr. REPLOGLE. Yes, sir.

Senator HARDING. I have examined the chart you have there; it is a very interesting chart.

Mr. REPLOGLE. Yes; I would like to show this chart to the committee [exhibiting chart].

At the time of the Garfield coal order, January 17, 1918, the production of the principal steel products was as follows:

Merchant bars dropped from 137,000 tons a week down to 55,000 tons.

Plates for ship construction dropped from 90,000 tons down to 45,000, or just 50 per cent.

Projectile steel, which is a very important factor, dropped from 67,000 tons, to 37,000 tons.

After the mills began to get fuel, as you will see from this chart [indicating], the production steadily increased, and our production of plates now, on our telegraphic reports for last week, was 106,000 tons a week, or just 12,000 a week more than the country has ever produced in any week in its history.

But here was the condition the steel manufacturer was up against: His mill was shut down, either 100 per cent, or greatly restricted, at an average rate of production of about 45 to 50 per cent. Even to-day at the blast furnaces, pig iron is being produced at the rate of about 27,000,000 tons, as compared to an annual capacity of about 45,000,000 tons; in other words, it is a little more than 60 per cent, approximately.

We are going to get in a very serious situation in regard to other things. The necessities of our allies are very great. Gen. Pershing has secured some 750,000 tons of steel from the French and the British Governments to meet his urgent necessities, and has agreed to replace it with an equivalent tonnage of steel in this country, in various forms of plates, projectile steel, etc.

Now, we are producing projectile steel largely in rail mills, because before the war there was no capacity for that kind of steel, and no necessity for it. We are rolling those projectile shapes in rail mills; and now the necessities of the railroads are such that they will have to be given every consideration; otherwise our transportation system will break down.

The CHAIRMAN. Was any time set in which we were to replace that steel obtained from our allies?

Mr. REPLOGLE. Yes, sir; we are overdue on that now; some of it was promised for several months ago. But we are giving them part of it. At the same time, we are trying to meet the necessities of the Emergency Fleet Corporation first.

The CHAIRMAN. What are the relative priorities now of the Emergency Fleet Corporation?

Mr. REPLOGLE. I have the priorities here in this statement [indicating]. It is practically all AA1, which is the highest order of priority.

The CHAIRMAN. It does not come ahead of the Navy work, does it?

Mr. REPLOGLE. It comes ahead of some of the Navy work not ahead of the torpedo-boat destroyers or those submarine chasers. I find here [indicating] that a total of 70 per cent of the Emergency Fleet Corporation tonnage is AA1 tonnage; that is the highest rating.

Senator VARDAMAN. May I ask what your particular function is in the Government?

Mr. REPLOGLE. Different departments of the Government, including the Emergency Fleet Corporation, and including the allied Governments, or the allied purchasing commission, present to us their requirements in steel.

The CHAIRMAN. Mr. Replogle is connected with the War Industries Board.

Senator VARDAMAN. Then, I would like to ask you this question: Do you think there is a probability of your being able to furnish the material necessary for the construction of these ships from now on as fast as it is needed?

Mr. REPLOGLE. Yes, sir; if we secure from the Emergency Fleet Corporation the detailed requirements at each yard—not as a whole, but at each yard—we can, and will, meet them 100 per cent.

Senator VARDAMAN. I wonder why that is not done, then.

Senator HARDING. Will you now state, for the information of the committee and for the record, to what the shortage of steel in the shipyards is due, as your board understands it—to a lack of detailed requisitions?

Mr. REPLOGLE. It is partly due to lack of detailed drawings; it is largely due to lack of definite information from the Emergency Fleet Corporation to enable us to get at the particular order, the particular sections, which they need now.

Senator VARDAMAN. Mr. Chairman, I understand that Mr. Hurley is in the next room; I suggest that we call him in, so that he can hear these statements of Mr. Replogle.

Senator HARDING. Yes; I think it would be a good idea for them to thrash the situation out here now.

The CHAIRMAN. Yes, we will invite Mr. Hurley to hear this statement.

(Mr. Hurley entered the committee room.)

The CHAIRMAN. Let me see if I understand this correctly: It appears that somebody, in placing these orders, ordered the steel from the mills here in the East, and then made contracts for fabricating it in mills in the West; the steel has to be shipped out there, and then fabricated and shipped back to Hog Island.

Now, who placed those orders? Who actually placed the orders as to each mill fabricating that steel?

Mr. REPLOGLE. These particular orders were practically all placed, as far as I know, before Mr. Hurley went into the Shipping Board. And you will remember, Mr. Hurley, that I wrote to you, giving you the names of the fabricating plants in the East which were operating *at a low rate of capacity.*

Mr. HURLEY. I remember that.

Mr. REPLOGLE. And that is partly responsible for the delays. But there is a combination of reasons, including that, which is a big factor, and the delay of the American International Corporation in furnishing to the fabricating plants details permitting them to fabricate the material which they now have in their yards.

The CHAIRMAN. I understand; but what I am trying to get at is, did the Emergency Fleet Corporation, in its own office, place these orders? Did they not confer with the War Industries Board at that time?

Mr. REPLOGLE. Not at that time, no, sir; that was not being done then.

Mr. HURLEY. What was the date that we began to do that?

Mr. REPLOGLE. You have been doing that for probably the last four or five months.

Mr. HURLEY. As I understand it, our purchasing department places an order with the War Industries Board for 1,000 tons of steel. The War Industries Board places that order with a mill; we have no voice as to the particular mill you place that order with. Is that correct?

Mr. REPLOGLE. That is correct.

Mr. HURLEY. After that order is placed with the mill, if that mill happens to be crowded with orders——

Mr. REPLOGLE (interposing). As they all are.

Mr. HURLEY (continuing). What efforts do you put forth to ascertain whether that order is going to be shipped to the fabricating plant that is producing fabricated material for the Shipping Board?

Mr. REPLOGLE. Your people, Mr. Hurley, have objected to the War Industries Board taking any part in expediting the delivery of material until they have exhausted all efforts of their own. They have written to the shipyards to that effect.

Mr. HURLEY. How long since?

Mr. REPLOGLE. That was perhaps three or four months ago. As I have written the Emergency Fleet Corporation, we expect that if, by the ordinary methods, you can not get the steel when and as needed, and if you will give us the details of those cases, we will either reallocate them to another mill or we will insist on that mill producing it.

The CHAIRMAN. Why do you have to call on the Emergency Fleet Corporation for information as to when all of those orders are placed, when you place the orders and you ought to have them all in your office?

Mr. REPLOGLE. Because those were their instructions, and they did not give us the information.

Senator HARDING. The record of these hearings will show that the Hog Island people have testified that they have men going all over the country trying to expedite the work.

The CHAIRMAN. Yes. What I am trying to get at is this: The statement was made a few moments ago—and that was why I wanted Mr. Hurley to hear it—that if the Emergency Fleet Corporation will only tell the War Industries Board that they have a certain order with, for example, the Midvale Steel Co., that their contract is to *furnish* the Fleet Corporation so much steel, and that they are behind *so much*, then the War Industries Board could stir the steel mill up, *and they* could help in that way; but that they can not do anything *unless* they have that information. On the other hand, you just said

in answer to Mr. Hurley's question, that they tell you, "We want so much steel," and that it is for you then to place with A mill an order for so much steel, and B mill an order for so much, and C mill an order for so much, and so on.

Now, if you actually divide up this order and place it with those mills, why is it that you have not the information as to what each mill has agreed to furnish, without having to call on the Emergency Fleet Corporation for that?

Mr. REPLOGLE. We have, Mr. Chairman, the amount that each mill is committed to furnish, but we do not have the order in which the different shipyards want it—and that condition changes from day to day; they will be ahead on one part probably and a little behind on another part, and in laying the keels they can not tell very far ahead the sequence in which all of that material is desired. And the Fleet Corporation refused to give us that information, feeling that they could handle that situation themselves better at each individual yard.

Mr. HURLEY. They have refused to give you any information as to that?

Mr. REPLOGLE. Yes.

Mr. HURLEY. Did Mr. Piez refuse to give you that information?

Mr. REPLOGLE. Admiral Bowles did.

Mr. HURLEY. Well, that is not the Shipping Board or the Fleet Corporation; that is the Hog Island plant that you are talking about. Does the same thing apply to the Emergency Fleet Corporation here?

Mr. REPLOGLE. Absolutely no. Mr. Piez and Mr. Hurley have given us everything we wanted; but the trouble is up there at Hog Island, and we could not get any details from Admiral Bowles.

Senator VARDAMAN. I asked a few moments ago, Mr. Replogle, about the cause of the delays, and you stated that it was the lack of detailed plans for these fabricated ships. Now that Mr. Hurley is present, I wish you would repeat what you said, so that we may bring out why these detailed plans have not been furnished.

Mr. RAPLOGLE. We have been told by fabricators—for instance, Carroll & Porter is one of them—a number of steel men, such as Mr. Grace, report that there is a considerable tonnage at various shipyards on which the details of fabrication have not been given to the fabricating plant. I think you will find that the Submarine Boat Corporation is one of those yards. But the fact remains that we are shipping sufficient steel in volume to build 550,000 tons of ships per month, and have been shipping at that rate for three months.

Mr. HURLEY. Yes; but you are not shipping it to the right shipyard, and you are not shipping the right kind of steel; and if you place an order with a steel plate mill, and they have other orders and they do not ship the steel as per program—if they ship the private steel first, for commercial purposes, of course that interferes with the whole program. Your volume of steel may be in 10 yards, and one yard may be short of steel.

Mr. REPLOGLE. If that is true——

Mr. HURLEY (interposing). I do not know that; I am just assuming that that is the case.

Mr. REPLOGLE. If that is true, that is due to our inability to get from the Emergency Fleet Corporation, or the shipyards, the details which will permit us to correct that.

Mr. HURLEY. What further details do you want, when you place this order with the steel company? What is your method of follow up, so that you may know when deliveries should be made?

Mr. REPLOGLE. All that we follow up is the requirements of the Emergency Fleet Corporation, the Navy, the Army, and the different departments as a whole, because your people have specifically stated that it is not our function to follow up those details.

Mr. HURLEY. Well, I am simply trying to find out what the system is. You have not any follow-up system as to that?

Mr. REPLOGLE. No.

Mr. HURLEY. Suppose you place an order with a steel mill which can not possibly deliver it for three months. What is your method of trying to find out whether they can fill the order which they take within the time required?

Mr. REPLOGLE. These reports which I have [indicating] tell us the condition of the various mills and the relative importance of all the orders they have on hand; and in allocating that steel, it is given to the mills best adapted to produce it.

It ought to be understood, to begin with, that, contrary to the general impression that has been created—and I am afraid, Mr. Hurley, that you have added to that—to the effect that there is a surplus of steel, there is a very acute shortage of steel, and particularly of plates, and it is going to become very much more critical. The Director General of Railways has plans for a large number of cars, and we have asked them to conserve the use of plates to the greatest possible extent.

Mr. HURLEY. What is the capacity of plates in the rolling mills this year?

Mr. REPLOGLE. The capacity is about 6,000,000 tons or 6,250,000 tons.

Mr. HURLEY. How many tons of shipping can you make out of a ton of plates? We can make 3 tons of shipping out of 1 ton of plates; and we will not need half of that.

Mr. REPLOGLE. I assume that you can make almost 4 tons of shipping out of a ton of plates, or 3 tons out of a ton of all steel.

Mr. HURLEY. Let me ask you this question: How much are the steel companies short in their tonnage?

Mr. REPLOGLE. They have been running the plate mills on an average——

Mr. HURLEY (interposing). I do not mean that. I mean on specific orders, in specific cases. Who are the chief violators in the nondelivery of plates?

Mr. REPLOGLE. I do not know that there are any violators.

Mr. HURLEY. Well, not necessarily violators; I mean, who is short in the delivery of orders?

Mr. REPLOGLE. Practically every mill in the United States.

Mr. HURLEY. Is the United States Steel Corporation short?

Mr. REPLOGLE. Yes, sir.

Mr. HURLEY. Our records do not show that.

Mr. REPLOGLE. They are not particularly short as to your material, but there are a lot of other requirements——

Mr. HURLEY (interposing). Well, we are talking about ships now. I am not interested in other material now. We want ships first. This material that you will put into ordnance, and all the other

material, will stay in this country, and not go abroad unless the ships can be furnished.

Mr. REPLOGLE. I am not speaking of ordnance, but there are requirements of plates in many other lines; for instance, for locomotive construction. They claim that they can not build the ships unless you have the locomotives to handle the material that goes into them.

Mr. HURLEY. I deny that.

Mr. REPLOGLE. That condition is improving each week; and we are shipping now at the rate of 12,000 tons a week more than has ever been produced brfore.

Mr. HURLEY. How many mills now are short of steel plates that can not perform their work. Do you know that?

Mr. REPLOGLE. No; I do not know that.

Mr. HURLEY. Then, if you do not know that, Mr. Replogle, how can you materially help in the present situation?

Mr. REPLOGLE. Because that is your job. We had a perfectly definite understanding that the Emergency Fleet Corporation would anticipate their needs and advise us of the needs of each yard, and then we would take care of them.

Mr. HURLEY. Do you mean each yard or each mill?

Mr. REPLOGLE. Each yard. We have information as to the situation in each mill.

Mr. HURLEY. How many notices have you received from the Fleet Corporation complaining about the nondeliveries?

Mr. REPROGLE. We received practically no notice until the last 10 days.

Mr. HURLEY. I am simply trying to get at the facts. Have you received 10 complaints, or 20 complaints, or 1 complaint?

Mr. REPLOGLE. We have received one complaint.

Mr. HURLEY. Then, do you mean to tell me that the Fleet Corporation has forwarded only one complaint, and that you knew nothing about this general shortage of material except through the Fleet Corporation?

Mr. REPLOGLE. There may be a good deal of shortage at various yards, but we have instructions from the Fleet Corporation to keep our hands off until they ask us to do something about it. They said, "When we want your help and your advice, we will ask for it," and that is what we are waiting for now.

Mr. HURLEY. What has Mr. Farrel done that you take exception to?

Mr. REPLOGLE. The only exception that I took to Mr. Farrel—and I took that to Judge Gary and all the members of that committee—was that I told them that they were creating an entirely wrong impression as to the plate situation in this country; that, contrary to the opinion that was being expressed to the effect that there was a surplus, there was a decided and very acute shortage.

Mr. HURLEY. Do your figures show that?

Mr. REPLOGLE. Absolutely.

Mr. HURLEY. Do they show the capacity of the different mills?

Mr. REPLOGLE. Yes.

Mr. HURLEY. Did you see that telegram that Judge Gary sent abroad?

Mr. REPLOGLE. Yes.

Mr. HURLEY. He said there was plenty of steel, did he not?

Mr. REPLOGLE. No.

Mr. HURLEY. He said they could produce 5,000,000 tons or more of steel and could increase the capacity if necessary?

Mr. REPLOGLE. Even 5,000,000 tons would not be sufficient.

Mr. HURLEY. Have you a statement of the requirements, then, to offset Judge Gary's statement? Have you got the figures regarding the situation there?

Mr. REPLOGLE. I do not have them. But the program by the Director General of Railways will require 575,000 tons of plates. We have 300,000 tons for England——

Mr. HURLEY (interposing). I am not talking about that. Judge Gary and Mr. Farrell and the other steel men in the American Iron and Steel Institute say that there is plenty of steel. Now, you make the statement that we are going to be short of plates. In order to back up your statement, you ought to be able to give your reasons for saying that. There is a discrepancy between your statement and Judge Gary's telegram to Mr. Baruch on the subject; and I think we ought to get the facts.

Mr. REPLOGLE. The trouble is, you take the opinion of every one about the steel requirements of the Government——

Mr. HURLEY (interposing). I am not taking it; I am asking you about the telegram that Judge Gary sent out.

Mr. REPLOGLE. If that is true, why do they not get the plates? We are short of plates.

Mr. HURLEY. I am only trying to bring out the facts; we are all trying to do the same thing; but you make one statement and Judge Gary makes another; I do not know which is correct. I believe both of you are trying to give the facts; we are entitled to know the facts. Now, you take Judge Gary's statement and his telegram to Mr. Baruch. What have you to say as to that?

Mr. REPLOGLE. Mr. Hurley, I do not mean to dispute Judge Gary's knowledge of the situation; but he is not in a position to know the requirements of the united governments. There is only one place that that information can be obtained, and that is down in our office.

Mr. HURLEY. What are the requirements of the allied governments? I know something about that.

Mr. REPLOGLE. England right now wants 300,000 tons of plates, and our Army people have agreed to furnish them an enormous tonnage of plates. The details of that are now on the ocean coming over here, from Gen. Pershing. He has taken 700,000 tons from them, and 300,000 of what is to be returned will have to be in plates.

Mr. HURLEY. What will the plates be used for?

Mr. REPLOGLE. The plates will be used for ship construction.

Mr. HURLEY. Well, of course, you will not furnish those until you take the matter up with us, and the entire problem is settled?

The CHAIRMAN. What is the supply now?

Mr. REPLOGLE. It has been down as low as 45,000 tons a week; and it is now up to 105,000 tons of steel.

The CHAIRMAN. How much have you on hand now?

Mr. REPLOGLE. Do you mean the Emergency Fleet Corporation?

The CHAIRMAN. No, how much of plates have the mills on hand?

Mr. REPLOGLE. It is shipped as made.

The CHAIRMAN. You can not tell how much they have on hand?

Mr. REPLOGLE. Oh, you mean the tonnage on hand on order?

The CHAIRMAN. Yes.

Mr. REPLOGLE. There are 2,374,711 tons on order.

Mr. HURLEY. From whom?

Mr. REPLOGLE. Sixty-two thousand tons of that is for the Army; 182,000 tons of it is for the Navy; 831,018 tons is for the Emergency Fleet Corporation. The total Government orders for plates for the United States Government are 1,203,000 tons. Canada has 700,000 tons; England, 53,000; France, 39,800 tons; Italy, 43,000 tons, and the balance is domestic, non-Government commerce, for the locomotive builders, the car builders, the builders of tanks for oil refineries, and work of that character.

These reports that I have here [indicating] show each week where they are shipping the material; and they are not shipping very much non-Government material, except some on which there is a high priority rating, which, after consideration by the Priorities Board, was deemed of sufficient importance to give them a very high rating.

Mr. HURLEY. Will you not specify just one or two of the high priority ratings that are ahead of us?

Mr. REPLOGLE. Well, there is some, for instance on the boilers.

Mr. HURLEY. Boiler plate; all right.

Mr. REPLOGLE. And there is some on the fireboxes, and stuff of that kind.

Mr. HURLEY. That is for locomotives.

Mr. REPLOGLE. I was instructed to give England 5,000 tons a week of ship plates.

Mr. HURLEY. Are you doing that?

Mr. REPLOGLE. We have been doing that in the last few weeks.

Mr. HURLEY. Do you not think our shipyards ought to get that first?

Mr. REPLOGLE. Yes.

Mr. HURLEY. Did you get permission from the Shipping Board?

Mr. REPLOGLE. Yes.

Mr. HURLEY. They released it, did they?

Mr. REPLOGLE. Yes; 10,000 tons. But it comes right back to this: There is no use of our shipping to the Emergency Fleet Corporation plants which do not need steel—and we are doing that, because you do not tell us when they do need it.

Mr. HURLEY. How long have you known that?

Mr. REPLOGLE. For several weeks. They are still clamoring for plates.

Mr. HURLEY. It all goes back to this: That you place the orders, and that you placed them with some steel companies that could not deliver it, for one cause or another; you are not necessarily to blame for that. It may be that if you did place the order with a concern that could not deliver it in six months, and you wanted it in two months, that would be a mistake. Are you familiar with the priorities placed with those concerns before you placed those orders?

Mr. REPLOGLE. I have that information before me, the priorities as to each individual plant.

Mr. HURLEY. Well, with all that, if they do not ship the plates after the order is placed, there is where the trouble is. The fact is that

these orders are placed in thousands of tons, and nobody follows them up. Of course, with all this criticism it must be said that this is a big job. But everybody figures that as soon as his order is placed the war is won; you do not follow it up.

Mr. REPLOGLE. We do follow it up. We follow up all but the Emergency Fleet Corporation orders, and we have been instructed not to follow those up by your people.

Mr. HURLEY. I remember about that.

Mr. REPLOGLE. Admiral Bowles told me frankly that it was none of my business, practically.

Mr. HURLEY. That is an individual case.

Mr. REPLOGLE. It is the individual case that counts.

Mr. HURLEY. Will you answer this question: In what way did Mr. Farrell interfere with your work? He volunteered to see that these plates were delivered to the different ship yards; your people did not want him to do that. Why was that?

Mr. REPLOGLE. I do not quite understand your question.

Mr. HURLEY. After you placed the orders with the plate mills, Mr. Farrell, of the Steel Corporation, who is chairman of the shipping committee of the American Institute of Iron and Steel, volunteered to see that those plates went out of the mills and went to the different shipyards that wanted the plates. You took exception to that.

Mr. REPLOGLE. No; I did not.

Mr. HURLEY. What did you do?

Mr. REPLOGLE. On the contrary, I asked them to do that; it was at my request that they did that.

Mr. HURLEY. Are they doing it now?

Mr. REPLOGLE. They are doing it now.

Mr. HURLEY. Are they responsible for this failure to deliver?

Mr. REPLOGLE. I do not think any steel man is responsible for the failure. The supply is far less than the demand. The demand for plates is far less than the supply; that is the answer.

Mr. HURLEY. Well, we all agree that there was a shortage of fuel last winter.

Mr. REPLOGLE. There is a shortage now.

Mr. HURLEY. There will be one for about 30 days.

Mr. REPLOGLE. There will be a shortage for months.

Senator VARDAMAN. Here is a point that was brought out a few minutes ago, Mr. Hurley. This gentleman said that you are shipping the plates from the East to as far west as Omaha, Nebr., for fabrication, while the mills here in the east in close proximity of Hog Island are prepared now to do that work, and in that way save that enormous expense and delay in shipping to the West and back again to the East.

Mr. HURLEY. What are the names of those mills?

Mr. REPLOGLE. Well, I made the statement that that took place in the early stages, before Mr. Hurley came on.

Senator VARDAMAN. Yes; I believe that was what you said.

Mr. REPLOGLE. And I wrote a letter to Mr. Hurley to that effect in New York, and I have a copy of that letter with me.

Mr. HURLEY. Yes; I remember your writing about that.

Mr. REPLOGLE. And that is the steel to-day. Mr. Hurley, that is being delayed. Sixty-two per cent of the steel has left the mills, and only something like 3 per cent has been received at Hog Island.

Now, there is a big jam in transportation there, and it was inevitable, with 2,000 or 3,000 miles of transportation.

Mr. HURLEY. There is no doubt that transportation delays have entered into the nondelivery of steel.

Mr. REPLOGLE. Now that has been corrected, and I have no doubt since Mr. Hurley has taken charge that it is going to be prevented. In spite of the shortage of plates, the shortage will not fall on the Emergency Fleet Corporation; we will see that they get sufficient to meet the demands, if we know the requirements at each yard, which I asked Mr. Piez yesterday to furnish.

Mr. HURLEY. You say that you have not a list of the shortage in the different yards so that you can follow it up with the steel mills?

Mr. REPLOGLE. No, sir; I have no such list.

Mr. HURLEY. I will see that that is done before half-past four this afternoon.

Mr. REPLOGLE. We have asked for that repeatedly.

Mr. HURLEY. I am sure that Mr. Piez has given the order for it.

Senator HARDING. Do you think that will relieve the situation?

Mr. REPLOGLE. It will, I think, Senator; it will probably take three or four weeks before it is absolutely corrected.

The CHAIRMAN. You have the figures as to Hog Island now, have you not?

Mr. REPLOGLE. No; I have not; they have given me only four specific orders, which we have taken up. Most of the tonnage was with the Midvale Steel & Ordnance Co., and Mr. Corey has given it his individual attention, and it has practically all been shipped in the past three or four days.

The CHAIRMAN. You know of the shortage at Hog Island, do you not? They have reported that to you, have they not?

Mr. REPLOGLE. No, sir; we do not have the total shortage; we only have the individual orders, which amount to 3,000 or 4,000 tons, when there is an urgent need for them.

The CHAIRMAN. What you want are their detailed requirements; then it is up to your office to get behind those orders. You know when they were placed.

Mr. REPLOGLE. But we placed that total tonnage, distributed, probably, between 20 different mills. We have no way of knowing which particular plate or which particular angle, whether it is a 6 by 6 angle or a 6 by 6 ship channel or something like that, we have no way of knowing which particular sections of plates they need in March or April or May.

Mr. HURLEY. That is our business.

Mr. REPLOGLE. That is their business, and if they furnish that to us it will absolutely be cared for, because the steel people are "on their toes" in connection with the matter, and they appreciate the urgency of the need.

Senator VARDAMAN. Mr. Chairman, I must leave the committee room now; but I want to say first that if we can get these gentlemen to come down here from time to time they will straighten out some of the tangles.

Mr. HURLEY. Yes; I wish the committee could keep in session, you would accomplish a great deal for us; you have been very helpful along those lines.

Now, Mr. Replogle, it is not a question of parts; it is not a question of mills. If they place the order for plates with the proper mill—and they do not get behind that mill, as I understand it—your understanding now is that we then are to find out about the movement of the plates and when they are going to be delivered. When you place the order with the plate mill, do they promise you when they are going to deliver them?

Mr. REPLOGLE. Yes. We get the requirement from the Emergency Fleet Corporation that approximately so much of this tonnage will be required in March, so much in April, and so much in May, June, and July, for example.

Mr. HURLEY. The other fellow is receiving it; and if he does not receive it in the way in which you place it, and somebody is needed to push it along, then it is our duty to see that that steel is shipped and not held; is that your idea?

Mr. REPLOGLE. But we tell them that we want so many tons for the Emergency Fleet Corporation, as nearly as we can tell your requirements for the particular months, we tell them we want so many tons for the Baldwin Locomotive Works——

Mr. HURLEY. Let us stick to shipping requirements.

Mr. REPLOGLE. But this is all a part of the same situation; we tell them we want so much for the Ford Motor Co., for those submarine chasers. And they follow those instructions.

Mr. HURLEY. Well, have they done so?

Mr. REPLOGLE. Absolutely.

Mr. HURLEY. What is the delay, then?

Mr. REPLOGLE. Just because there is a total shortage of plates.

Mr. HURLEY. I do not quite understand you there.

Mr. REPLOGLE. In other words, put it the other way: Where have the plates gone? You can not tell me of one ton of plates that were used for anything but important Government work.

Mr. HURLEY. Well, I say that there is a difference of opinion. Here is one of a group of steel men saying there are plenty of plates; and here you say there is not.

Mr. REPLOGLE. If there are plenty of plates, what excuse is there for nondelivery of them?

Senator HARDING. If I understand Mr. Hurley correctly, he has the impression that some of the nonessential business is getting the steel, is that right?

Mr. HURLEY. Yes; I feel that the plates for ships have not been given the consideration that they are entitled to.

Senator HARDING. Do you mean by that that there is a priority for the Navy or the War Department?

The CHAIRMAN. Probably there are old contracts outstanding, and these people are supplying those commercial contracts.

Mr. REPLOGLE. No, sir; that is incorrect. We followed that up. I want to make this plain, however, that the total tonnage of any plate mill can not be applied on your orders. You know the character of your orders, and your specifications call for certain tests, and there are the Lloyds' specifications, etc.; and then fuel is a big factor; a high amount of coal used throws the lot out. Now, we send the waste that will not do for you to other people. You can not work 100 per cent on United States Government material; no plate mill can do it.

And [illegible] other [illegible]

Mr. HURLEY. [illegible] your orders

Mr. REPLOGLE. [illegible]

Mr. HURLEY. [illegible] placed in [illegible] erence

Mr. REPLOGLE. [illegible]

Mr. HURLEY. [illegible]

Mr. REPLOGLE. [illegible]

The CHAIRMAN. [illegible] months or

Mr. REPLOGLE. [illegible]

The CHAIRMAN. [illegible]

Senator HARDING. [illegible] orders [illegible]

Mr. HURLEY. [illegible]

Mr. REPLOGLE. [illegible] that. [illegible]

Mr. HURLEY. [illegible] think [illegible] tries Board [illegible] Industries Board [illegible] the orders [illegible] job; but I think [illegible] buck." [illegible] gotten up. [illegible] up, do they not?

Mr. REPLOGLE. Yes.

Mr. HURLEY. And we have [illegible] of course, that makes some difference.

Senator HARDING. It seems to me that inasmuch as the success of all our war activities depend on the production of ships, we ought to have every agency of the Government striving to produce ships.

Mr. HURLEY. That is right; but everybody wants to get his order placed first.

Senator HARDING. But shipping is of the first importance.

Mr. HURLEY. That is what we said to the President yesterday.

Mr. REPLOGLE. Do you not think we are shipping sufficient steel to meet your total requirements?

Mr. HURLEY. You may be for the total requirements; but then you may be piling it up in one yard and not giving any to another.

Mr. REPLOGLE. Well, you are the only man that can tell us about that.

Mr. HURLEY. Yes. We will straighten this matter up with the War Industries Board, Mr. Chairman.

Senator HARDING. Yes; all of these meetings where you can thrash things out are very helpful.

The CHAIRMAN. Mr. Replogle, you spoke of a letter from the Fleet Corporation stating that it was not your function to expedite deliveries of steel for them. Suppose you insert that letter in the record.

Mr. REPLOGLE. Yes, sir. Mr. F. A. Browne, the general purchasing agent of the Emergency Fleet Corporation, advised the shipbuilders that it was not the function of the War Industries Board

the American Iron and Steel Institute to act as expediting agencies for the numerous orders placed by shipbuilders with the steel mills. He said that the purchasing division of the Emergency Fleet Corporation had an expediting department, organized for this specific purpose.

The CHAIRMAN. What was the date of that letter?

Mr. REPLOGLE. January 18, 1918. A copy of this letter was sent to us. I will insert it in the record.

(The letter referred to is here printed in full, as follows:)

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION,
Washington, January 15, 1918.

SUBMARINE BOAT CORPORATION,
5 Nassau Street, New York City.
(Attention Mr. Nicholas.)

GENTLEMEN: We are inclosing herewith copies of letters, dated January 11 and 12, from the American Iron & Steel Institute to Mr. Ackerson, assistant to the vice president and general manager of the Emergency Fleet Corporation. Mr. Ackerson has requested me to take this matter up with you for the purpose of straightening out the matters referred to in the attached correspondence.

It is not the function of either the War Industries Board or the American Iron & Steel Institute to act as expediting agencies for the numerous orders placed by shipbuilders with the steel mills. The Purchasing Division of the Emergency Fleet Corporation has an expediting department organized for the specific purpose of aiding shipbuilders and others in obtaining materials. We would request, therefore, that you communicate directly with the steel mills in regard to expediting your orders. If you fail to obtain satisfactory results from the steel companies, you should take the matter up immediately with the Purchasing Division of the Emergency Fleet Corporation, and we will be very glad to give you any assistance within our power.

In letter of January 12 from the American Iron & Steel Institute to Mr. Ackerson, complaint is made as to the irregular way in which your company submits its orders to the steel mills, making it necessary for the steel mills to hold open capacity which they have reserved for you, thus reducing their output. Please give this matter your careful attention and avoid holding open tonnage without specifying against it, so that steel mills may, as far as possible, operate to maximum capacity.

Very truly, yours,

FRANK A. BROWNE,
General Purchasing Officer.

Inclosures (5).
FAB—orh.
CC—Mr. G. A. Duncan, with copies of letters referred to.

The CHAIRMAN. Is it your understanding that a similar letter was sent to all the steel-ship yards?

Mr. REPLOGLE. Yes, sir; I know it was sent to a number of them.

The CHAIRMAN. You have mentioned a letter that you wrote to Mr. Piez in regard to getting detailed information from the Fleet Corporation. I suggest that you insert that in the record.

Mr. REPLOGLE. Yes, sir. In order to correct the situation at several of the shipyards, which is largely due to lack of detailed information by the War Industries Board as to the situation at each individual shipyard, I wrote a letter to Mr. Charles Piez, vice president and general manager of the Emergency Fleet Corporation, under date of April 4, 1918, as follows:

APRIL 4, 1918.

Mr. CHARLES PIEZ,
Vice President and General Manager Emergency Fleet Corporation,
Washington, D. C.

MY DEAR MR. PIEZ: We confirm our verbal request to you and a number of your representatives, that if we are given detailed information as to your monthly requirements at each of your various shipyards, they will be promptly cared for.

I inclose memorandum showing shipments to the Emergency Fleet Corporation as taken from the signed reports of the various steel mills [illegible] each week

January 5 to March 30, inclusive, from which you will note that the shipments for five weeks ending February 2, which would really be January delivery, 106,594 tons of plates and 175,943 tons of all kinds of steel, including plates, shapes, and bars, were shipped to you. In the four weeks ending March 2, which would cover February shipments, 125,526 tons of plates were shipped and 209,383 tons total steel.

In the four weeks ending March 30, 142,261 tons of plates were shipped and 232,851 tons total steel.

Your total requirements of steel as given by Mr. F. A. Brown, general purchasing officer, under date of March 16, was 180,761 tons in January, 1918, 181,694 tons in February, and 227,973 tons in March, or a total for the first quarter of this year of 590,428 tons, as compared to shipments during this period of 618,177 tons, or approximately 27,000 tons in excess of your estimated requirements, despite the fact that during this time all of the plate mills were greatly restricted in their output on account of their utter inability to secure fuel. Most of them were running at times at about 40 per cent capacity and at least one of them, Worth Bros.' plant at Coatesville, being shut down for over one month, despite every effort made with the fuel and railroad administrations to give them relief.

A study of the above figures, however, make it plain that if any serious shortage exists, it is due to the following causes:

The placing many months ago by the Emergency Fleet Corporation of orders with the steel mills at Coatesville, Pottstown, Bethlehem, and other eastern points for shipment to fabricating plants in the Chicago district and far west as Kansas City for fabrication of material later to be delivered at your Philadelphia shipyards, involving the transportation of material thousands of miles before reaching the shipyard with the inevitable delays in delivery, as we pointed out to Mr. Hurley in our letter to him of November 28, 1917, and which you acknowledged under date of December 18, 1917, advising that Mr. Charles Day, would have charge of your production department and that it would be one of his functions to keep in touch with us on the subject of apportioning steel, in order to prevent the condition which has now arisen. I might state that Mr. Day to my knowledge has never been to this office nor consulted us in any way.

Practically all of your shipyards are urging for delivery of material and many of them are demanding very much more than they can use, which condition is sure to result in further complicating the already badly congested traffic situation, and it is very plain to the writer that your requirements can be met 100 per cent if we are given an intelligent estimate of your requirements per month for each yard.

We have not had this information, despite repeated requests for it, and I trust that you will furnish it at the earliest possible date, as otherwise the existing situation can not be corrected.

Yours, very truly,

J. LEONARD REPLOGLE,
Director of Steel Supply.

Emergency fleet shipments.

Dates.	Total steel.	Plates.	Date.	Total steel.	Plates.
Week:			Week:		
Jan. 5	41,622	28,668	Feb. 23	53,823	30,085
Jan. 12	32,616	19,339	Mar. 2	65,286	37,918
Jan. 19	26,194	13,164			
Jan. 26	31,647	19,565	Total February	209,383	125,526
Feb. 2	43,864	25,858			
			Week:		
Total January	175,943	106,954	Mar. 9	52,261	34,282
			Mar. 16	63,422	34,874
Week:			Mar. 23	55,304	33,488
Feb. 9	33,317	20,005	Mar. 30	61,864	39,617
Feb. 16	56,957	37,026			
			Total	232,851	142,261

(The following letters and telegrams were subsequently directed by the committee to be inserted in the record:)

UNITED STATES SENATE,
April 6, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman Commerce Committee, United States Senate.

MY DEAR SENATOR: Here is a telegram just received from the Biloxi Commercial Club. Please read it to the committee making the investigation and make it a part of the printed record.

Very truly, yours,

JOHN SHARP WILLIAMS.

BILOXI, MISS., *April 5, 1918.*

Hon. JOHN SHARP WILLIAMS,
Senate, Washington, D. C.:

We deny emphatically statement made by C. S. Frank before Senate committee investigating shipyards that housing facilities at Biloxi are inadequate. We can accommodate over 2,000 people and hotels 500 additional. Advise committee of our protest.

BILOXI COMMERCIAL CLUB.

HOUSE OF REPRESENTATIVES U. S.,
Washington, D. C., April 6, 1918.

Hon. DUNCAN U. FLETCHER,
Chairman Commerce Committee,
United States Senate.

DEAR SENATOR: I inclose a telegram from the Biloxi Commercial Club, which is self-explanatory.

Very sincerely yours,

PAT HARRISON.

BILOXI, MISS.,
April 5, 1918.

Hon. B. P. HARRISON,
Washington, D. C.

We deny emphatically statement made by C. S. Frank before Senate Committee investigating shipyards that housing facilities at Biloxi are inadequate. We can accommodate over 2,000 people and hotels 500 additional. Advise committee of our protest.

BILOXI COMMERCIAL CLUB.

(The following letter and salary lists of the Merchant Shipbuilding Corporation and the Submarine Boat Corporation were subsequently directed by the committee to be inserted in the record:)

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, March 28, 1918.

Hon. DUNCAN FLETCHER,
United States Senate.

My DEAR SENATOR: In accordnce with the request of the Senate Commerce Committee, I inclose herewith a copy of the list of employers of the Merchant Shipbuilding Corporation receiving more than $200 per month.

Very truly, yours,

CHARLES PIEZ,
Vice President and General Manager.

Merchant Shipbuilding Corporation.

Title.	Department and name.	Total monthly salary.	Amount actually paid by Merchant Shipbuilding Corporation.	Previous occupation.	Salary per month.
	General manager.				
General manager	W. T. Smith	$1,666.67	$833.33	General manager, Chester Shipbuilding Co. (Ltd.); prior to that, president and sole owner of Industrial Service Corporation.	$1,666.67
Assistant general manager	E. L. Fries	625.00	312.50	Assistant to president, Chester Shipbuilding Co. (Ltd.); previous to that, auditor of disbursements and general storekeeper, Union Pacific R. R. Co.	350.00
Do	Donald D. Smith	625.00	625.00	Vice president and engineer, Southern Surety Co., St. Louis, Mo., in charge of contract bond department.	450.00
Special assistant	W. E. Dodds	600.00	600.00	President Standard Cast Iron Pipe & Foundry Co.	600.00
Engineering assistant	G. B. Rice	500.00	250.00	Chief engineer, Schoelkopf Aniline (average) & Chemical Works (Inc.), Buffalo; general superintendent Thomas A. Edison (Inc.), Orange, N. J.	412.50
	Assistant general manager's staff.				
Secretary to assistant general manager (D. D. Smith).	W. E. Richardson	250.00	250.00	Construction work for Southern Surety Co. in Michigan	250.00
Construction assistant	H. M. Haagenson	333.33	333.33	Splady, Albee & Smith, contractors, Minneapolis, Minn., salary and bonus.	250.00
Progress assistant	W. E. Post	225.00	225.00	Engineering, Hughes-Keenan Co., Mansfield, Ohio, and others.	230.00
Technical assistant	C. H. Norrlin	225.00	225.00	Consulting engineer and assistant general manager, Imperial Mining, Land & Timber Co., London, England.	1,040.00
Lumber expert	Charles S. Hinckley	(1)	.....	Consulting engineer, timber, etc.	625.00
	Assistant to general manager and staff.				
Assistant to general manager	C. A. Leonardi	625.00	312.50	Assistant to general manager, Chester Shipbuilding Co. (Ltd.), Industrial Service Corporation.	625.00
Estimating assistant	F. P. Hall	[2] 291.67	(2)	F. P. Hall Co., consulting engineers	416.67
Betterment order assistant	W. R. Hanretty	[2] 239.34	(2)	Art Metal Construction Co.	254.33
Change order clerk	E. L. Kennan	[2] 200.00	(2)	Consulting engineer	300.00
Insurance assistant	J. H. Sweetwood	[2] 208.33	(2)	J. H. Sweetwood, insurance	250.00
Betterment order clerk	W. D. Holmes	250.00	250.00	P. & F. Corbin, hardware	250.00

[1] Active time, $20 per day.

[2] Varies.

Merchant Shipbuilding Corporation—Continued.

Title.	Department and name.	Total monthly salary.	Amount actually paid by Merchant Shipbuilding Corporation.	Previous occupation.	[illegible]
	Production engineer and staff.				
Production engineer	A. H. Cooke	$625.00	$312.50	President A[illegible]d Efficiency Engineers, e. g., New York Audi[illegible] income from fees and dividends (aver-age)	$650.00
Assistant production engineer	F. T. Warner	[1] 333.33	(1)	A[illegible] neer, Bergen County, N. J., and field [illegible] States Drainage & Irrigation Co.	250.00
Do	T. S. Purrington	[1] 250.00	(1)	M[illegible] [illegible]ction work, with McCambridge Co.,	260.00
Production assistant	C. W. Bayne [2]	[1] 275.00	(1)	[illegible] nd efficiency departments of Ford [illegible], Mich. (2½ years); American Inter-[illegible]ling Corporation efficiency expert	350.00
Do	John Graham [2]	[1] 275.00	(1)	[illegible]th Iron Works	325.00
	Engineering manager and staff.				
Engineering manager	M. Willemstyne	600.00	300.00	Naval architect and engineer, Chester Shipbuilding Co. (Ltd.).	500.00
Naval architect	C. A. Ward, jr	416.66	208.33	Naval architect, Lake Torpedo Boat Co	308.33
Chief engineer	J. E. F. Grant	416.66	208.33	Engineer with Kinlund & Drake	300.00
Assistant naval architect	E. Sivard	[1] 300.00	(1)	Assistant naval architect with Chester Shipbuilding Co. (Ltd.) (2½ years).	216.00
Do	J. Crockett	[1] 250.00	(1)	do	216.00
Do	E. A. Allen	[1] 216.66	(1)	Naval architect with League Island Navy Yard	169.00
Chief draftsman	J. W. Sutton	[1] 300.00	(1)	Chief draftsman hull drawing room with Chester Shipbuilding Co. (Ltd.) (1½ years).	216.00
[illegible]stant chief draftsman	T. Morrison	[1] 250.00	(1)	Draftsman structure department, Sun Shipbuilding Co	235.00
[illegible]ine chief draftsman	C. M. Harker	[1] 250.00	(1)	Charge man with New York Shipbuilding Co., and with United States Shipping Board.	200.00
[illegible]pervising inspector	W. Tweedy	416.66	208.33	Chief engineer Chester Shipbuilding Co. (Ltd.), and master mechanic American Shipbuilding Co.	375.00
Assistant supervising inspector	Wm. Boyd	[1] 266.66	(1)	Previously with New York Shipbuilding Co	208.33
[illegible]teel inspector	W. H. Graham	225.00	225.00	Inspector W. R. Hunt Co	225.00
[illegible] inspector	S. Gill	216.66	162.16	Structural engineer, Franklin Machine & Boiler Works	216.00
[illegible]or	J. A. Merriman	[1] 200.00	(1)	Erector, American Bridge Co	150.00
[illegible] inspector	Harold Sinclair	416.66	416.66	Inspector with Turbine Equipment Co	300.00
[illegible]or (Bristol)	F. F. Sanders	200.00	200.00	Chief draftsman, V. T. Ritter	216.00

Tugboat inspector	A. Haig	[2] 216.66		Robins Dry Dock & Repair Co.	190.00
Inspector	Edward Manners	[2] 225.00		Chief engineer, Globe Shipbuilding Co.	225.00
	Plant engineer and staff.				
Plant engineer	G. L. Skolfield, jr	216.66	216.66	Plant engineer, Chester Shipbuilding Co. (Ltd.)	166.66
Assistant plant engineer	S. B. Lilly	303.33	303.33	Assistant professor of civil engineering, Swarthmore College, income from salary and fees.	300.00
Do	R. G. Peterson	290.00	290.00	Assistant manager, Thomas Lamb (Inc.), New York, income from salary and bonuses.	216.66
Chief inspector	M. J. McLaughlin	335.00	335.00	Rodgers & Haggerty, contractors, 103 East One hundred and twenty-fifth Street, New York, income from salary and commissions.	300.00
Architect	L. Cubberly	250.00	250.00	In private practice for 19 years in Long Branch, N. J., and New York City (average).	325.00
Assistant architect	L. Kintzing	238.33	238.33	With Palmer & Hornbostel, architects, 63 William Street, New York.	346.66
Engineer	J. B. Linn	216.66	216.66	Engineer with Sperry Gyroscope Co., Brooklyn, N. Y.	250.00
Chief designer	Carroll Beale	325.00	325.00	Private practice as civil engineer under the firm name of Beale & Meggs.	500.00
Chief estimator	F. S. Bridges	216.66	216.66	With Amsterdam Building Co., 140 West Forty-second Street, New York.	200.00
Inspector	J. G. Dempsey	216.66	216.66	In business for himself (average)	300.00
Do	M. G. Davis	216.66	216.66	do	166.66
Do	A. Koppelman	216.66	216.66	With Empire Construction Co., New York City	173.50
Do	J. W. Maher	216.66	216.66	With Machay & Scholtz, contracting	166.66
Do	T. P. Turner	216.66	216.66	Engineer, Westinghouse Electric Manufacturing Co., Philadelphia, Pa. (average).	200.00
Do	Jas. McMurtie	216.66	216.66	With United States Realty Co., Flatiron Building, New York City.	216.66
	Superintendent of construction and staff.				
Superintendent of construction	W. H. Mason	583.33	583.33	General engineer, Thomas A. Edison, Orange, N. J., income, salary, and percentage of profits.	833.33
Assistant superintendent of construction	Walton Valle	300.00	300.00	Superintendent, Manhattan Construction Co., New York, salary and 10 per cent bonus.	500.00
Office manager	E. S. Opdyke	283.33	283.33	Business manager, aniline division, Thomas A. Edison, Silver Lake, N. J., and purchasing agent and assistant manager, Edison Portland Cement Co., Stewartsville, N. J.	200.00
Yard superintendent	Phillip Rogers	400.00	400.00	General superintendent, Rodgers & Haggerty, New York City.	350.00
General construction foreman	J. E. Combs	225.00	225.00	Master mechanic, Jacobs & Davies, New York City; previous to that master mechanic, Booth & Flynn, New York City.	250.00
General carpenter foreman	M. A. Gundy	250.00	250.00	Carpenter foreman, Cranford Bros., and Jacobs & Davies, New York City.	175.00
Master mechanic	Richard Gainey	275.00	275.00	General foreman, J. C. Rodgers, jr., United States Realty Co., and King Bros., all of New York City.	240.00

[1] Varies.
[2] Additions to staff of production engineer, effective Feb. 1, 1918.
[3] At present all salary being paid by Chester Co., but will devote part time to Bristol when ship operations under way there.

Merchant Shipbuilding Corporation—Continued.

Title.	Department and name.	Total monthly salary.	Amount actually paid by Merchant Shipbuilding Corporation.	Previous occupation.	Salary per month.
	Superintendent of construction and staff—Continued.				
Superintendent	J. P. Collins	250.00	250.00	General foreman, Watson Contracting Co., and Rodgers & Haggerty, of New York City.	$240.00
Civil engineer	W. H. Yetman	238.33	238.33	Assistant engineer, department of city transit, city of Philadelphia, Pa.	183.33
Planning engineer	J. L. Phillips	216.66	216.66	Engineer, J. L. Phillips, (average)	250.00
Team superintendent	Thos. D. Smith	225.00	225.00	Confidential representative, F. J. Machette, 101 Park Avenue, New York.	300.00
	General purchasing agent and staff.				
General purchasing agent	Griffith Colt	416.66	208.33	Purchasing agent, Lake Torpedo Boat Co., Bridgeport, Conn.	206.66
Purchasing agent, Philadelphia	M. N. Smith	300.00	300.00	Chief clerk, purchasing department, Chester Shipbuilding Co. (Ltd.).	173.00
Chief clerk	D. W. Degan	225.00	225.00	Head of loss and damage bureau, Union Pacific R. R. Co., Omaha, Nebr.	150.00
Local purchasing agent, Bristol	W. S. Hancock	250.00	250.00	Manager Steinbursh & Co., Cincinnati, Ohio	500.00
Assistant purchasing agent, Bristol	Frank E. Glynn	303.33	303.00	Lumber expert and buyer, Fred J. Ley Contracting Co., Springfield, Mass.	300.00
Contract clerk	W. S. Sutherland	250.00	250.00	Chief accountant, purchasing department Pennsylvania R. R. Co.	260.00
Secretary to general purchasing agent	Torris Thomsen	[1] 200.00	(1)	Purchasing agent, Pennsylvania Shipbuilding Co., Gloucester, N. J.	110.00
	Employment and service department.				
Employment and service manager	H. H. Magowan	416.66	208.33	Assistant superintendent of shell loading job, Baldwin Locomotive Works.	150.00
				Assistant quartermaster E. I. du Pont Co., Carneys Point, N. J., salary and 20 per cent bonus.	180.00
Service manager	A. C. Rowland	416.66	208.33	General manager, Mitchell Motor Car Co., Philadelphia, Pa.	500.00
Rel estate agent	Charles Parker	250.00	(1)	Conducted a general real estate and insurance business, income from commissions.	450.00
Plant employment agent	C. L. Lenderman	250.00	250.00	Gun cotton supervisor, plant No. 3, E. I. du Pont de Nemours Powder Co., Carneys Point, N. J.	200.00
Plant service superintendent	J. P. Allen	300.00	300.00	Business manager, Hugh L. Cooper, 101 Park Avenue, New York.	583.33

Assistant plant service superintendent	George W. Becker	200.00	200.00	Assistant manager, Reisenweber's (Inc.), New York City	208.33
Physician	Dr. Jos. M. Ellenberger	200.00	200.00	Private practice in Philadelphia, Pa., income from fees (approximate).	200.00
Assistant real estate agent	George Jennings	216.66	216.66	Outside superintendent, George B. Post & Sons, 101 Park Avenue, New York.	200.00
	Works supply department.				
Works supply manager	T. C. Hammond	416.66	208.33	Expediting department manager, Thompson-Starrett Co., 40-51 Wall Street, New York.	275.00
Chief clerk	H. R. Heierle	[1] 250.00	(1)	Office manager, E. R. Burt & Co., Trinity Building, New York.	200.00
Expediter	C. E. Hoppe	[1] 217.00	(1)	Steel expediter, Thompson-Starrett Co., New York	200.00
Do	J. L. King	[1] 216.66	(1)	Miscellaneous expediter, Thompson-Starrett Co., New York	195.00
Do	S. Nelson	[1] 216.66	(1)	do	175.00
Do	P. L. Spier	240.00	240.00	Engineer, Robbins-Riply Co., 50 Church Street, New York.	175.00
	Chief clerk.				
Chief clerk	J. B. Gantz	250.00	125.00	Secretary to the general manager Chester Shipbuilding Co.; prior to that, office manager, eastern headquarters, International Exposition; secretary to commissioner general, International Exposition; salary, $150 per month plus expenses.	216.66
	Legal department.				
Associate counsel	Geo. S. Munson	[2] 250.00	(2)	Private practice, income from fees	.....
	Accounting department.				
Assistant comptroller	E. Eckhardt	500.00	250.00	Special accountant, Union Pacific R. R. Co.; salary and fees for special services.	300.00-350.00
Assistant treasurer	A. E. Copeland	300.00	150.00	Assistant secretary and assistant treasurer, Chester Shipbuilding Co. (Ltd.).	250.00
Auditor	H. M. James	375.00	375.00	Senior accountant, Touche, Niven & Co., salary and fees for sepcial services.	190.00-209.00
Assistant to auditor	H. J. Strack	216.66	216.66	Secretary and Treasurer, Standard Cast Iron Pipe & Foundry Co.	175.00
Do	C. B. Sellers	225.00	225.00	Special accountant, Central Illinois R. R. Co.: salary does not include expenses, which were separately paid.	185.00
Cashier	H. L. Retz	216.66	216.66	Paymaster with Standard Cast Iron Pipe & Foundry Co.	173.00
Accountant	E. R. Jackson [2]	[1] 225.00	(1)	Traveling material accountant, Union Pacific R. R. Co.	135.00
Works manager	Sidney H. McLane	1,000.00	1,000.00	Consulting capacity, Chester Shipbuilding Co. (Ltd.)	583.33
Assistant works manager	C. Knight	260.43	260.43	Remington Arms Co.; prior to that, with John Morrow Construction Co.	224.16
General timekeeper	F. F. Whittam	250.00	250.00	Remington Arms Co.; salary does not include overtime	120.00
Chief piecework counter	Jos. M. Taggart	250.00	250.00	Terry Shipbuilding Corporation	200.00
Production man	Geo. B. Gates	200.00	200.00	Own business	340.00
Progress man	Albert Newton	200.00	200.00	Fore River Shipbuilding Co.; salary, which does not include bonus.	117.00
Progress manager	Leslie Robertson	200.00	200.00	do	140.00

[1] Varies. [2] Formerly employed exclusively on Chester Shipbuilding Co. business. Effective Feb. 1, 1918, becomes a "joint" employee.

Merchant Shipbuilding Corporation—Continued.

Title.	Department and name.	Total monthly salary.	Amount actually paid by Merchant Shipbuilding Corporation.	Previous occupation	Salary per month.
	Accounting department—Continued.				
Head electrician	E. Busby	$260.00	$260.00	William Gordon Corporation	$216.66
Assistant superintendent, inside machinist.	Geo. Rohrbock	216.66	216.66	Standard Cast Iron Pipe Co	216.66
Chief engineer power plant	J. A. Meyer	250.00	250.00	United States office inspector of machinery, Cramp Shipbuilding Co.	160.00
Assistant superintendent, outside hull	J. McHaffie	300.00	300.00	Skinner & Eddy, Seattle, Wash	238.33
General foreman, outside hull	T. L. Smith	225.00	225.00	Gloucester Shipbuilding Co	208.00
Superintendent, inside machinist	J. H. Bickley	375.00	375.00	Reading Iron Co.; salary, which does not include bonus or fees for consultation.	200.00
Superintendent, outside machinist	W. T. Wilson	375.00	375.00	Chester Shipbuilding Co	300.00
General storekeeper	W. J. Orr	250.00	250.00	Fore River Shipbuilding Co.; salary, which does not include bonus.	166.66
Superintendent, inside hull	S. C. Brissland	375.00	375.00	Seattle Construction & Dry Dock Co.; salary, which does not include bonus.	250.00
Superintendent, outside hull	W. M. McHaffie	375.00	375.00	Puget Sound Navy Yard	235.73
Port captain	R. Barry	300.00	300.00	Retired capitalist	.....

fting, plant and equipment—Continued.

R. Van Wyck, in charge electric work, including distribution syst fire-alarm system, and building wiring plans $200.00
$1 per month in same line of work with American Can Co.; $150 per month with H. L. Cooper & Co., consulting engineers.

Alexander Geist, assistant chief draftsman 200.00
$152 per month, same position, with Snare & Triest; $200 per month, same position, with Wm. Kratzer & Co.

Installation and equipment:

W. H. Farnsworth, superintendent 400.00
$210 per month and bonus as assistant chief electrician, Youngstown Sheet & Tube Co.; $325 per month as chief electrician, Submarine Boat Corporation; promoted to $400 per month on account increased responsibilities and excellent work.

J. C. Ferver, chief electrician 300.00
$225 per month and bonus as assistant chief electrician, Youngstown Sheet & Tube Co.

F. H. Shaw, chief electrician 275.00
Made $1,250 per month his last year in power house and pumping plant contracting business; $500 per month salary engaged in construction of sewerage and ducts, pipe lines, construction, and irrigation.

Frederick Ames, superintendent of rigging 250.00
$150 per month, plus expenses and bonus, construction superintendent, Chicago Building Co.

Harry Barrett, assistnant superintendent of rigging 225.00
$200 per month and bonus, constructing superintendent, Indiana Steel Co.

A. J. McCarte, master mechanic 200.00
$175 per month, assistant chief engineer, Brighton Mills, Passaic.

Robert Lee, pipe fitter (per week) 50.00
$40 per week engaged in similar work on several large operations, including work at Princeton University.

Joseph Atz, millwright foreman (per week) 50.00
Not working here now.

Mechanical engineering:

E. P. Worden, mechanical engineer 600.00
$550 as chief engineer, Henry R. Worthington Co.

E. G. Daniels assistant to mechanical engineer 325.00
$250 per month and bonus as chief draftsman and designer, Chicago Bridge & Iron Works

C. W. Ferguson, chief inspector, engineering department 250.00
$183 per month as assistant superintendent, Henry R. Worthington Co.

C. E. Sanford, hull designer 230.00
$166 per month as hull designer, Office of Chief of Engineers, War Department.

M. J. Weichert, ship designer 200.00
$200 per month as assistant chief engineer, Griscom Russell Co.

Engineering and drafting, hull design:

M. A. Hammond, chief draftsman 350.00
$250 per month and expenses as chief draftsman, Lackawanna Bridge Co.

Chas. T. Binks, draftsman 250.00
$216 per month with the Mack Iron & Wire Works.

H. A. Christensen, draftsman 200.00
$180 per month as ship designer with the Riter-Connelly Co.

Template and special form work:

J. H. Madigan, superintendent 350.00
$250 per month and bonus as superintendent of all shape work for Chicago Bridge & Iron Co.

A. S. Fredrickson, special draftsman, develops mold of ship plates 275.00
$200 per month in charge building dredges and hulls, Milwaukee Bridge Co.

Geo. C. Lind, superintendent of bending floor 250.00
$225 per month as superintendent Greenville, Pa., plant, Chicago Bridge & Iron Co.

Template and special form work—Continued.

Joseph Meyers, foreman bending shop..... $225.00
(Graduate of instructor training center; rate fixed because of excellent work since return.) $150 per month in charge blacksmith work and painting department, Lackawanna Bridge Co.

Plant construction:

P. W. Petersen, superintendent..... 500.00
$400–$500 per month constructing bridges and erecting plants for various railroads and corporations.

John P. Taffany, superintendent of construction..... 250.00
$300 per month in engineering and contracting business.

Fred. Herbst, steel superintendent..... 250.00
$250 per month as general superintendent, Worden-Allen Co.

Gideon Underwood, assistant superintendent of construction..... 225.00
$200 per month as construction engineer on various large projects.

V. C. Corrier, superintendent of construction..... 200.00
$250 per month engaged in construction of various large buildings and railroad construction.

Fred. J. Mersfelder, master plumber..... 200.00
$250 per month in business as licensed plumber and plumbing contractor.

Thomas Kelly, superintendent of pile driving (per week)..... 60.00
$52 per week superintending large foundation and construction jobs.

Louis D. Kilgus, superintendent of construction (per week)..... 55.00
$54 per week as superintendent of building construction.

M. L. Southard, assistant superintendent of construction (per week).. 55.00
$180 per month superintending the construction of a large number of buildings.

C. D. Willer, superintendent of sewer construction (per week)..... 55.00
$50 per week on steel construction, bridge building, reinforced concrete and water and sewer lines.

Geo. T. Plowman, assistant to superintendent plant construction (per week)..... 50.00
$58 per week as superintendent of construction and architect.

F. J. LaFarr, superintendent of construction (per week)..... 50.00
$46 per week as construction superintendent.

W. J. Wood, painting superintendent (per week)..... 50.00
$50 per week as painting foreman and contractor.

Arthur C. Babbitt, general foreman (per week)..... 50.00
$55 per week as foreman and superintendent on various construction work.

Nicholas L. Myler, general foreman (per week)..... 50.00
$52 per week as superintendent on construction work.

Inspection bureau:

F. G. Waring, manager..... 500.00
$500 per month and other emoluments as general manager of fabricating plant, Lackawanna Bridge Co.

J. A. Colby, district manager of inspection, Philadelphia..... 300.00
$458 per month inspection of fabricated structural steel.

C. A. Bergendahl, district manager of inspection, Chicago..... 250.00
$225 per month inspecting structural material.

W. R. Dolan, district manager of inspection, Cleveland..... 250.00
$225 per month, engaged in all departments of structural steel business.

C. M. Wood, district manager of inspection, Pittsburgh..... 250.00
$250 per month, in charge of executive and operating forces for inspection of fabricated steel.

E. S. Coleman, district manager of inspection, Milwaukee..... 225.00
$210 per month as assistant superintendent of fabricating shops.

L. D. Randall, technical assistant to manager..... 225.00
$175 per month, engaged in design and construction of steel merchant vessels.

Jos. C. Swartz, shop inspector, fabricated ship steel..... 225.00
$187 per month as inspector fabricated steel.

C. L. Brennan, assistant to manager..... 225.00
$190 per month as draftsman and special representative on erection of fabricated steel mill and factory buildings.

Inspection bureau—Continued.

M. J. Coyle, chief material order clerk (ship steel)..... $225.00
$175 per month, ordering mill material for fabricated steel.

R. R. Bozell, assistant chief material order clerk..... 200.00
$150 per month, contracting engineer, Memphis Steel Construction Co.

T. W. Armstrong, expediter and inspector, Chicago..... 200.00
$200 per month, superintendent of erection of fabricated structural steel.

Ways department:

J. J. Scollan, manager of ways..... 833.33
$1,000 per month as superintendent of the Niagara shipyard.

F. A. Ross, superintendent of ways..... 500.00
$750 per month in charge of erection department, Wisconsin Bridge Co.

J. S. Stull, jr., assistant superintendent of ways..... 400.00
$333 per month as general superintendent of hulls, Newark Shipyard Foundation Co.

F. W. Clark, assistant superintendent of ways..... 225.00
$245 per month in charge of erection for Worden-Allen Co. and Lackawanna Bridge Co.

H. D. Knapp (foreman, to be made superintendent on qualifying).... 225.00
$150 per month as superintendent of steel construction with McGregor & McIntyre, Toronto; same salary with Canadian Allis-Chalmers Co.

Chas. Goodhand (foreman, to be made superintendent on qualifying).. 225.00
$200 per month as foreman steel construction, Ridson Shipyard, San Francisco; same with Canadian Allis-Chalmers Co.

Harry Mulk, foreman ways machinist..... 225.00
$150 per month and board, chief engineer and hull machinist, Erie Railroad Co.

L. E. Wissner, foreman steel erection, ship department..... 200.00
$225 per month, foreman steel construction Pennsylvania Steel Co.

F. W. Conard, foreman steel erection, ship department..... 200.00
$165 per month, structural foreman, Decatur Bridge Co.

Thos. Scollan, foreman carpenter in charge of blocks and lining..... 200.00
$200 per month, foreman carpenter (structural) George Shank, Chicago.

Yard department:

R. D. Wood, superintendent..... 400.00
$375 per month and bonus, assistant manager Decatur Bridge Co.

Jas. K. Stafford, assistant to superintendent (in charge fabricated material records)..... 250.00
$180 per month, chief draftsman, Decatur Bridge Co.

H. D. Gillingham, assistant superintendent (in charge storage of small material at ways and records for same)..... 225.00
$200 per month, sales manager, Public Service Gas Co., Newark, N. J.

Harry K. Dick, general foreman in charge of all outside work..... 225.00
$200 per month, superintendent for J. L. Simons Co., contractors, Chicago.

Edward Hughes, assistant in charge, Plain Steel Material Storage & Records..... 200.00
$180 per month with Jones & Laughlin Co. at Chicago.

Traffic department:

W. C. Mueller, traffic manager..... 500.00
$300 per month, general agent, traffic department, Chicago & Alton R. R. Co.

Arthur W. Granzen, assistant traffic manager..... 250.00
$225 per month, secretary to general eastern freight agent, New York City.

Transportation department:

J. V. Hassett, superintendent..... 300.00
$175 per month, general yard master and assistant train master, New York Central; entered present position Oct. 1, 1917, at $50 per week, promoted Dec. 1 to $250 per month, and Feb. 1, 1918, to $300 per month, because of increased responsibilities and excellent services.

Transportation department—Continued.

R. Hillman, train master $200.00
$150 per month, yardmaster, Jersey Central and Pennsylvania Railroad Cos.

John Ledden, master mechanic 200.00
$150 per month, locomotive repair foreman, Buffalo, Rochester & Pittsburgh R. R.

Purchasing department:

J. P. Nicholas, purchasing agent 800.00
$800 per month, vice president Lackawanna Bridge Co., and interest in company.

E. J. Tiefenthaler, assistant purchasing agent 300.00
$225 per month as contracting engineer for structural steel fabricators.

David Currier, assistant to purchasing agent 300.00
$250 per month, sales manager for Emerson Brandingham Co.; $175 per month, inspector, Great Lakes Engineering Co. (shipyard).

J. A. Maguire, clerk (expediter, keeps all records) 200.00
$175 per month, with overtime, as expediter and estimator, Submarine Boat Corporation; $125 per month, checker, detailer, etc., Riverside Bridge Co., Martins Ferry, Ohio.

A. G. Nelson, buyer 200.00
$150 per month, assistant purchasing agent, Butterworth-Judson Corporation.

Jos. M. Ramsey, expediter 200.00
$333 per month in contracting business.

Accounting department:

R. J. Randall, auditor 500.00
$250 per month, treasurer Buffalo Builders' Supply Co.; $200 per month, secretary, same concern.

John B. Gillett, jr., accountant 300.00
$300 per month and liv ng expenses, field auditor Camp Dix, part of 1917; $250 per month, senior accountant, Arthur Young & Co., New York City.

Chas. L. Hayes, accountant 300.00
$333 per month, president Acme Builders' Supply Co., Buffalo; $250 per month, vice president Buffalo Builders' Supply Co.

Harry Turner, accountant 300.00
$200 per month, accountant in charge, King Sewing Machine Co., Buffalo; $125 per month. accountant, New York & Buffalo Audit Co.

John E. Fitzgerald, accountant 200.00
$182 per month and bonus as accountant and paymaster, Electric Boat Co.

Herbert J. Fogal, accountant 200.00
$250 per month, accountant Fries Contracting Co., New York.

L. L. Ostrander, accountant 200.00
$175 per month, public accountant in Buffalo.

Employment and welfare department:

H. R. Brady, commissioner 500.00
$200 per month and traveling expenses as secretary National Erectors Association; during same period was also member of Brady-Schmitt Co., contractors, to which he devoted half his time.

Samuel MacClurkan, superintendent of passenger trains (employees) .. 250.00
$225 per month as commercial agent for Chicago, Milwaukee & St. Paul R. R. Co.

General:

F. M. Lawrie, paymaster 250.00
$200 per month, cashier Remington Arms & Ammunition Co.

Parsells Cole, manager commissary department 250.00
$580 per month in catering, commissary and restaurant business.

R. E. Dooley, chief of police 208.33
$340 per month, inspector New York police force.

J. McGovern, superintendent of automobiles 200.00
$175 per month, operating own garage.
$195 per month, repair man for Pierce-Arrow Co.

The following letter and report were subsequently directed by the committee to be inserted in the record:

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Washington, April 8, 1918

Hon. DUNCAN U. FLETCHER,
United States Senate.

MY DEAR SENATOR: I inclose herewith for the information of the committee a copy of a letter dated April 3, 1918, from Admiral Bowles concerning the Hog Island shipyard and the American International Shipbuilding Corporation. This report is submitted in accordance with the resolution of the Senate Committee on Commerce.

Very truly, yours,

CHARLES PIEZ,
Vice President and General Manager.

UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION,
Philadelphia, April 13, 1918.

Mr. CHARLES PIEZ,
Vice President and General Manager,
Emergency Fleet Corporation, Washington, D. C.

DEAR MR. PIEZ: Responding to the request contained in your letter of March 5, and to that conveyed to me by the honorable Duncan U. Fletcher of the Senate Committee on Commerce in his letter of March 30th, I am submitting to you the following report concerning the Hog Island Shipyard and the American International Shipbuilding Corporation.

On assuming my duties my first inspection of the Hog Island shipyard was made early in the morning before and during the hours of getting to work, and the second inspection was made during the night to observe the night work. As a result of these inspections I informed the agent that there was great loss of time in getting to work in the morning and that the supervising staff was not on the job. The night work was reduced to a minimum and also the Sunday work, which hitherto had been proceeding as on week days. This resulted in a marked improvement in the individual efficiency of the workmen.

As to the shipways I found that in order to comply with the schedule of completion of the vessels under contract it was absolutely necessary to have the whole 50 ways, 30 of which were longer and adapted to the 15-knot ships, and 20 of which were shorter and adapted to the 7,500-ton cargo boats. On examining this schedule of dates at which each way was required for the laying of the keel, some of which were in June, July, and August, it was found that work on a number of ways could be suspended, the railroad track approaches completed, and the work taken up with a reduced force and have all the ways completed in ample time. This when put into effect reduced the congestion of materials and labor and equipment and improved the general efficiency of labor in that part of the yard, as well as dispening with a considerable amount of equipment under high rental.

The trackage of railway laid out was investigated, and it was found that this could be reduced in amount by about one-fifth and still have ample surplus capacity for the classification and handling of cars. This was done and the track work devoted to the most necessary items for the immediate conduct of construction work. The organization for the construction of track and the operation of the railroad and the following up of distant traffic was carefully investigated by an expert employed by me, which resulted in a very considerable reduction of this staff and the mechanical force and an improvement in the facility of operation, so that to-day the material is being properly placed and the cars promptly unloaded.

After the railroad investigation above had proceeded to a considerable extent I became satisfied that the responsibility for the difficulties of organization of the shipyard were largely, if not wholly, upon the then president of the Shipbuilding Corporation. I had great difficulty in securing a statement of the organization which was correct, and found that there was not a clear division or line of responsibility that the men who were in charge of the different parts of the work did not know what their pay roll was; that the various parts of the work were not being properly coordinated; and that in the general rush for progress congestion of transportation and lax of supervision of workmen resulted.

About February 15 I informed the president of the American International Corporation that the work required his personal attention, which he arranged to give. On February 24 I wrote him that the president of the Shipbuilding Corporation was unequal to his task and requested his removal. He was replaced shortly by Mr. Frederick Holbrook, of Holbrook, Cabot & Rollins, an executive of tried experience in the conduct of his own business, and since he has been in charge there has been a continuous and steady improvement in the organization throughout its whole extent. He responded at once to my request for the transfer of the whole staff from Philadelphia to Hog Island, and has effected it already almost completely.

I also asked for the removal of the works manager and he has been replaced by a new and efficient man, with results of the most gratifying character.

As Mr. Holbrook held a subcontract for the construction of the fitting out piers, I arranged on advantageous terms for its cancellation.

The transfer of the staff from No. 140 North Broad Street, Philadelphia, to Hog Island shipyard has been accompanied by a reduction in automobiles in service from 87 to 46, and of the omnibuses in service from 11 to 3, arrangements having been made for transportation via workmen's trains.

I employed an expert to examine into and regulate the steam shovel and grading work, and this together with the rearrangement of work on the shipways, enabled us to dispense with steam shovels, locomotives, incidental machinery, and motor trucks of a daily average cost of about $3,500.

By investigation of the Fleet Corporation's department of health and sanitation very material reductions were made in the cost of buildings and equipment for the surgical, medical, and sanitary staff.

No arrangements having been made for the transportation of workmen by trolleys to Hog Island I have negotiated a contract with the Philadelphia Rapid Transit Co. for a double track service to Hog Island and similarly with the Philadelphia Railways Co., and expect within three months to have these services in operation, reducing the cost of transportation both to the Fleet Corporation and the workmen very materially.

At the present time an investigation is being made of the stores department, which has already resulted in a considerable reduction of the salaried force and will increase its accuracy and responsibility. An investigation is also being made of the employment service. Several other departments remain to be gone into, but the result up to date, while difficult to relate in detail has resulted in obtaining more than double efficiency of the labor and an excellent spirit throughout the organization.

I have received the most active and cordial cooperation from the officers of the American International Corporation who are continuing to devote themselves to the continued improvement of the organization. The situation was sufficiently satisfactory to enable me to make a recommendation for the award of 60 additional 7,500 ton vessels, with the prospect that they could be completed in the early fall of 1919 and in almost the same time arranged for the completion of the 120 ships under contract.

So far I have found it desirable to dispense with the services of about 14 of the higher salaried officers who were found inefficient or unsuitable. My effort, however, in this respect has been more to produce a direct responsibility of officials as the best means of securing economical expenditure of labor and material.

I have requested the Shipbuilding Corporation to establish a salvage department and reclamation service for tools, equipment, and materials, and a safety department to guard their employees.

I have been obliged to add to the cost of the plant in the building of the piers the amount of dredging and the crane service for fitting out the vessels, finding that the piers were of temporary construction and would not permit dredging to be carried on at some time in the future to a depth capable of a use for a shipping terminal, and that the crane service for fitting out the ships was inadequate for the speed required. These conditions will, I think, prove a great permanent value to the Government.

I am aware of the inadequacy of this report, but am gratified with the results obtained in the last two months, much of which is due to the able assistance which has been given me by Capt. . . S. Bookwalter of my office, being continually stationed at Hog Island; Mr. E. D. Levy, special expert on railroad transportation and traffic matters, as well as all others of my small staff who have given unremitting attention to the duties to which they have been assigned.

Very respectfully,

F. T. Bowles,
Assistant General Manager.

(Thereupon, at 1 o'clock p. m., the committee adjourned, subject to the call of the chairman.)

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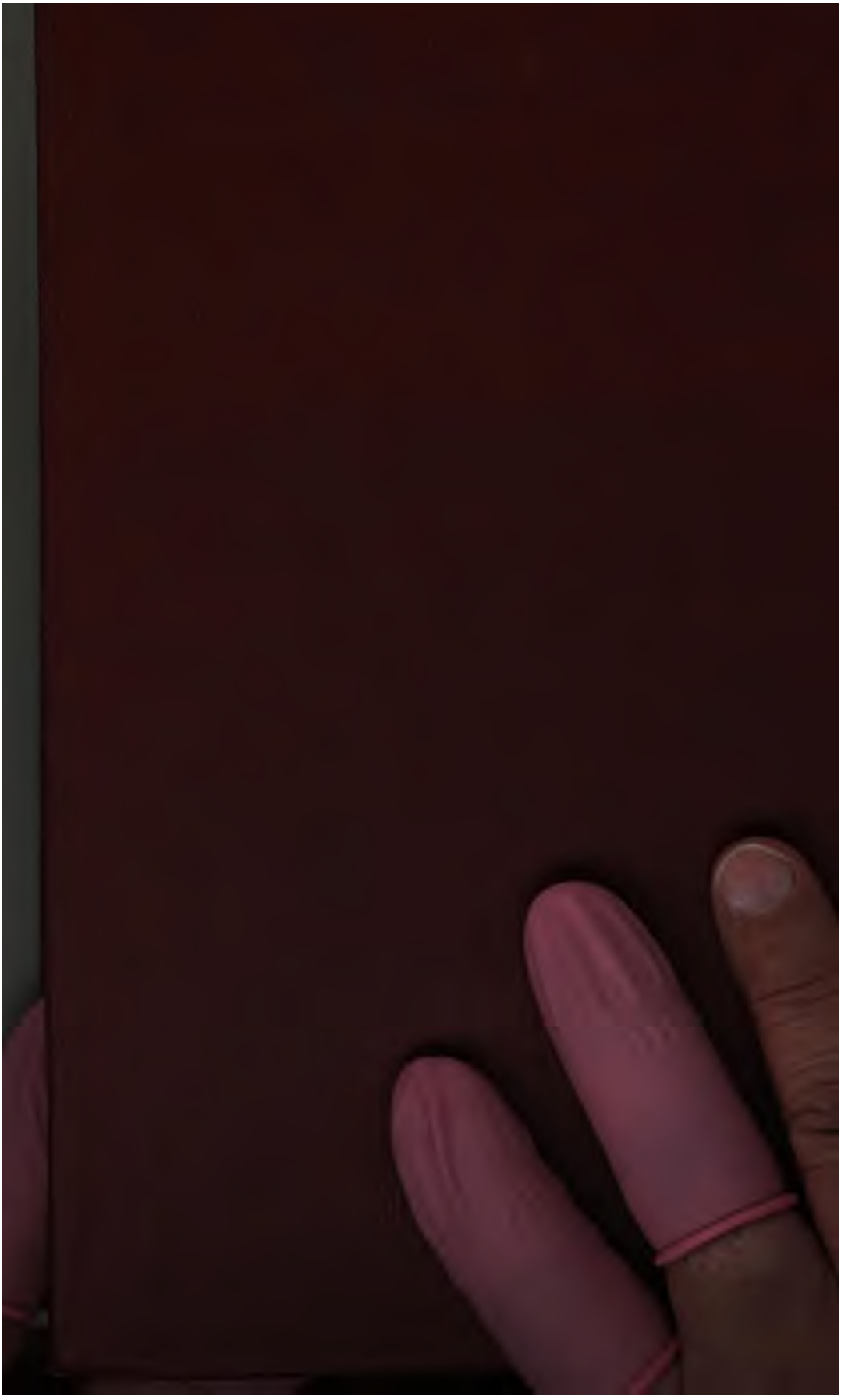
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